**CSI PRODUCT SPECIFICATIONS**

IDENTIFYING DEVICES - INTERIOR SIGNS 10 14 00

*SPEC. WRITER NOTES:*

* *Notes and comments are shown in italics. I.E. samples refer to the order form taken from the back inside cover of 2/90 Price Guide. These should be removed before printing this specification.*
* *References to 2/90 drawings and bulletins can be retained for a closed 2/90 specification but should be removed for an open specification.*
* *Page breaks are inserted at pivotal subject breaks. If altering document, select entire document and remove all page breaks. After customization, insert page breaks where needed.*
* *Delete products and subjects if they are not applicable to project. This document is created in a tabbed format, deleting section will automatically adjust tab format.*
* *Coordinate with sign drawings, message schedule and location plan terminology for correct and uniform nomenclature.*

**PART 1 – GENERAL**

1. DESCRIPTION
	1. This section specifies interior identification, informational, directional signs, and directories.
2. SUBMITTALS
	1. Samples: Submit one full size sample sign of the type, style, and color specified including method of attachment. If approved, the sample will become a part of the job.
	2. Manufacturer’s Literature: Manufacturer’s printed specifications, mounting details, installation, and maintenance drawings.
	3. Shop Drawings: Scaled for manufacturer and fabrication of sign types. Identify materials, size, typography, artwork, finishes, mounting, and accessory items.
3. DELIVERY AND STORAGE
	1. Package to prevent damage or deterioration during shipment, handling, storage, and installation. Maintain protective coverings in place and in good repair until removal is necessary. Store products in dry condition inside enclosed facilities.
	2. Deliver signs only when mounting surfaces are ready for installation work to proceed.
4. EXTRA MATERIALS
	1. Expedited Sign Maintenance Program: Coupon books for redemption of expedited replacement Inserts and additional signage.
5. REFERENCES
	1. Publications listed below form a part of this specification to extent referenced. Publications are referenced in text by basic designation only.
		* American National Standards Institute (ANSI) • Federal Specifications
		* American Society for Testing & Materials (ASTM) • Uniform Sign Code
6. WARRANTY
	1. Provide manufacturer’s warranty against defect in materials. Warranty shall provide material and labor to repair or replace defective materials at the manufacturer’s discretion. Damage caused by physical or chemical abuse or damage from excessive heat will not be warranted. Removal and reinstallation of existing signage is not warranted.

**PART 2 – PRODUCTS**

1. **GENERAL**
	1. Sign and graphic components are to be by a single manufacturer, including necessary mounting options, fittings, and fastenings.
2. **SIGN STANDARDS**
	1. SIGN TYPE
		1. Sign Type/Part No.: *SPEC WRITER NOTE: List the Part Number and Style of all signs required. i.e. Slide Modular Standard 2x10*
		2. End Cap Style: *SPEC WRITER NOTE: List End Cap / Frame Style. i.e. Slimline (SL)*
		3. End Cap Color: *SPEC WRITER NOTE: List End Cap / Frame Color. i.e. Satin Natural (101)*
		4. Mounting Option: *SPEC WRITER NOTE: List Mounting Option. i.e. Screw (D)*
		5. Insert Size: *SPEC WRITER NOTE: List Insert Size – height by length. i.e. 2x10*
		6. Insert Color: *SPEC WRITER NOTE: List Insert Color. i.e. Black (704)*
		7. Accents, Top / Bottom Trim: *SPEC WRITER NOTE: List Trim Style and Color. i.e. Accent Strip (AS) and Satin Natural (101)*
		8. Enhanced shapes: *SPEC WRITER NOTE: List shape, pattern, and color. i.e. Double Curve (CC) Pattern Linear 2 (L.2) White (708)*
		9. Finishes are to meet current Federal ADA and State requirements.
	2. TYPOGRAPHY
		1. Copy Option: *SPEC WRITER NOTE: List Copy Option. i.e. Direct Print (DP)*
		2. Copy Color: *SPEC WRITER NOTE: List Copy Color. i.e. White (708)*
		3. Copy Style: *SPEC WRITER NOTE: List Copy Style. i.e. Arial (ARL)*
		4. Copy Size: *SPEC WRITER NOTE: List Copy Size. i.e. 5/8*
		5. Copy Position: *SPEC WRITER NOTE: List Copy Position. i.e. Center (C)*
		6. Copy Case: *SPEC WRITER NOTE: Standard Upper and Lower Case unless specified All Caps or As Typed indicated in the Sign Message Schedule. i.e. All Caps (AC)*

Note: All ADA options are standard All Caps to be compliant.

* + 1. Copy shall be a true, clean accurate reproduction of typeface(s) specified.
		2. Letter spacing and in-between line spacing shall be set by manufacturer.
		3. Arrows, symbols, and logo art: To be provided in style, sizes, colors, and spacing as shown in drawings.
		4. Braille: Grade 2
		5. Translations: Grade 2 Braille copy, as noted in Sign Message Schedule, is responsibility of the sign manufacturer. Any second language text, as noted in Sign Message Schedule, is responsibility of the customer.
1. **SIGN TYPES**

General:

* Provide products produced by 2/90 Sign Systems, 5350 Corporate Grove Blvd SE, Grand Rapids, MI 49512, phone 800.777.4310, fax 616.656.4300.
* Sign type families are identified by numbers and letters, which identify the approximate size of the sign, height by width, along with a configuration of Inserts. *i.e. 2x10B Thin is a 2” high by 10” wide 2/90 Slide Modular Thin Profile sign with two 1”x10” Inserts.*
* Sign Type/Part No.: *SPEC WRITER NOTE: List the Part Number and Style of all signs required. i.e. Standard Modular 2x10*
	1. **SLIDE MODULAR SIGN SYSTEM**

The 2/90 Interchangeable Component Sign System shall be comprised of three primary components: Structural Rail, Copy Insert(s), and Interlocking End Caps or Frame.

* Interior sign system is capable of being arranged in a variety of configurations with a minimum of attachments, devices, and connectors.
* Interchangeable nature of the system will allow for changes of graphic components of the installed sign, without changing sign in its entirety.
* Slide is available in two thicknesses. Standard profile is 9/16” and can accept Inserts on both sides. Thin profile is 9/32” and can only accept Inserts on one side. *SPEC WRITER NOTE: Specify Standard or Thin profile. i.e. Slide Modular Thin*
* Slide shall allow for different mounting devices including adhesive tape, magnetic tape, hook and loop, screw, pin, freestanding, various panel hooks and ceiling options, and other mounting devices as specified. *SPEC WRITER NOTE: List Mounting Option: i.e. Screw (D)*
	+ 1. STRUCTURAL RAIL
			1. Structural Rail utilizes horizontal rails, spaced to allow uniform, modular sizing of Inserts. It is the internal structural member of the sign in extruded 6063-TS aluminum, anodized black.
			2. The Structural Rail may accept an ABS plastic, anodized aluminum, high-pressure laminate, or acrylic Insert on one or both sides, depending upon sign style.
			3. Structural Rail shall allow for different mounting devices including wall mounting for screw-on applications, pressure sensitive tape, freestanding mount, fabric panel mount, ceiling mount, and other mounting devices as specified. *SPEC WRITER NOTE: List Mounting Option. i.e. Adhesive (A)*
			4. Structural Rails can be converted in the field to permit a sign to be enlarged from one size to another, in height or width.
			5. Rail Joiners extruded in black PVC plastic. Rail Joiners connect Structural Rails together providing a butt joint along their edges; Rail Joiners are not visible in rail assembly.
			6. Accent Strips extruded in 6063-T5 aluminum also connect Structural Rails together but with a visible horizontal rib, which is seen between the adjacent Copy Inserts. Accent Strips are satin anodized and can be color matched in painted acrylic lacquer. *SPEC WRITER NOTE: List Trim Style and Color. i.e. Accent Strip (AS) Satin Natural (101)*
			7. Top/Bottom Trim extruded in 6063-T5 aluminum provides decorative trim cap, which butts flush to adjacent Copy Insert and encloses top or bottom of Structural Rail and Copy Insert. Top/Bottom Trim is satin anodized can be color matched in painted acrylic lacquer. *SPEC WRITER NOTE: List Trim Style and Color. Slimline (SL) Satin Natural (101)*
		2. COPY INSERTS
			1. Copy Inserts accept various forms of copy and graphics and attach to the Structural Rail with a hook detail or a magnet.
			2. Copy Inserts are interchangeable by sliding horizontally from either side of sign, and to other signs in system of equal width or height. Copy Inserts may also be front-loaded on to the rail magnetically.
			3. Wipe clean with a damp cloth. Do not use harsh chemicals or solvents.
			4. *SPEC WRITER NOTE:* *List Insert Size – height by length. i.e. 2x10. List Insert Color. i.e. Black (704)*
			5. Copy Insert Materials:
				1. ABS Inserts – .090” extruded ABS plastic core with .003” UV resistant acrylic cap bonded during extrusion/texturing process. Pressure bonded to extruded PVC hook using high-bond, pressure sensitive adhesive. Insert color is either integral or painted in acrylic lacquer. Finished in a Chromium industries #HM335RA texture pattern to prevent glare and disguise fingerprints.
				2. Aluminum Inserts – .028” coil anodized aluminum precision slit and laminated to extruded 6063-T5 aluminum Carrier Insert using acrylic adhesive.
				3. Wood & Stone Inserts – .031” vertical grade laminate precision slit and laminated to extruded 6063-T5 aluminum Carrier Insert using acrylic adhesive.
				4. Window Inserts – Extruded 6063-T5 aluminum with integral hooks for connection to Structural Rail. Color is anodized black, anodized satin, or painted acrylic lacquer. Inserts hold die-cut paper insert with a clear .020” textured polycarbonate lens.
				5. Subsurface Copy Inserts – textured .020” clear polycarbonate face with subsurface Direct Print copy. Insert is back sprayed with acrylic lacquer and laminated to an extruded aluminum Carrier Insert.
				6. UDO Subsurface Copy Inserts – textured .020” clear polycarbonate face with subsurface Direct Print copy which slides into Window Insert.
				7. Jewel Inserts – .060 non-glare acrylic painted subsurface in acrylic lacquer laminated to .030 ABS pressure bonded to extruded PVC hook using high bond, pressure sensitive adhesive with first surface Direct Print, applied High Performance Cast PVC vinyl, ADA, Direct Print Tactile, or ADA, Applied Tactile copy.
				8. Sliding Inserts – Extruded 6063-T5 aluminum with a black, or anodized satin finish with integral hooks for connection with Structural Rail. Holds .010” textured polycarbonate with subsurface Direct Print copy. Sliding Insert moves horizontally with an inset finger press exposing different graphic information.
				9. Photo-Luminescent Inserts – Comprised of a 0.065” PVC Strontium-Aluminates laminated with pressure-sensitive permanent acrylic adhesive to .030” ABS material. Pressure bonded to extruded PVC hook using high bond, pressure sensitive adhesive. Photo-luminescent material is light green in color. Material is available in Best performance level. Reference Technical Specifications Section 3)h)ii)(1) for Best Level Luminance Test Conditions.

* + - * 1. ADA, Direct Print Tactile Inserts – UV/LED-cured, 1/32” thick, direct-print raised characters and fully domed, clear Grade 2 Braille dots, printed on ABS, anodized aluminum, high-pressure laminates, acrylic, or direct-print background graphics Inserts. Background color for painted materials is painted with acrylic lacquer in the specified Insert color. Copy color is UV/LED-cured inks digitally applied directly to the substrate surface.
				2. ADA, Integral Tactile Inserts – Graphics and Insert materials are one piece. Tactile Photopolymer Inserts are .080” phenolic photopolymer with raised copy and fully domed Grade 2 Braille dots etched to 1/32” and pressure bonded to extruded PVC hooks with adhesive. Background color is painted in acrylic lacquer in the specified Insert color. Top surface of copy characters is then added by roller printing in the specified copy color using Silkscreen inks.
				3. ADA, Applied Tactile Inserts – Computer Aided Router cuts acrylic characters 1/32” thick; these are then bonded to ABS, anodized aluminum, high-pressure laminates, acrylic, or direct-print background graphics Inserts using 3M 467 adhesive. Raster Method of Braille consists of .059” diameter, fully domed, clear acrylic beads set into pre-drilled holes on ABS, anodized aluminum, high-pressure laminate, or acrylic Inserts resulting in 1/32” Grade 2 Braille text.
				4. ADA, Subsurface Tactile Inserts – UV/LED-cured, 1/32” thick, direct-print raised characters reverse printed subsurface to clear, vacuum thermoformable PETG. Materials are put into a Heat Vacuum Applicator (HVA) to form around the three-dimensional graphics, afterwards the fully domed Grade 2 Braille dots are formed. Insert is back sprayed with acrylic lacquer and laminated to an extruded aluminum carrier Insert.
				5. ADA, Exterior Integral Tactile Inserts – Graphics and Insert materials are one piece: .015 aluminum pressure bonded with adhesive to .060 acrylic with 1/32” raised copy and fully domed Grade 2 Braille dots, pressure bonded to extruded PVC hooks with adhesive. Background color is painted in acrylic lacquer in the specified Insert color. Top surface of copy characters is then added by roller printing in the specified copy color using Silkscreen inks.
		1. INTERLOCKING END CAPS OR FRAMES
			1. End Caps interlock to Structural Rail with steel spring clips to form an integral unit, enclosing and securing the changeable Copy Inserts, without requiring tools for assembly.
			2. End Caps or Frames are extruded in 6063-T5 extruded aluminum or injection molded ABS. Painted with acrylic lacquer.
			3. Interchangeable to either end of sign and to other signs in the system of equal height.
			4. Tamper-resistant feature can be added for Thin profile by notching structural rail to accept locking tab in End Cap clip or by use of screws for Standard profile.
			5. Seven End Cap styles are optional:
				- Round Corner • Square Corner
				- Slimline • Angleback
				- Stepback • Bullnose
				- Waterfall
			6. *SPEC WRITER NOTE: List End Cap / Frame Style. i.e. SL. List End Cap / Frame Color. i.e. 101*
		2. ENHANCED BACKERS
			1. Backer plate applied with adhesive to back of sign.
			2. Enhanced Backer Materials:
				1. Standard Backer – ¼” thick acrylic.

Pattern – modified with a digital receptive polymer to accept VOC free, ultra-violet cured inks digitally applied subsurface directly to the substrate.

Solid Color – painted subsurface in acrylic lacquer.

* + - * 1. Aluminum Backer – .028” coil anodized aluminum and laminated to .090 extruded ABS plastic.
				2. Wood & Stone Backer – .031” vertical grade laminate and laminated to .090” extruded ABS plastic.
		1. GRAPHIC PROCESS
			1. Type and symbols are to be produced in the following manner:
				1. Direct Print Copy – VOC free, ultra-violet cured inks digitally applied directly to the substrate surface. *SPEC WRITER NOTE: only available in matte finish. i.e. 715 Yellow is matte.*
				2. Vinyl First Surface Copy – High Performance Cast PVC Vinyl Copy. *SPEC WRITER NOTE: 700 series is matte finish; 200 series is gloss finish. i.e. 715 Yellow is matte; 215 Yellow is gloss.*
				3. Laser Print Copy – Computer generated graphics laser printed on die-cut paper Insert.
				4. Subsurface Copy – Textured .020” clear polycarbonate face with subsurface Direct Print copy. Insert is back sprayed with acrylic lacquer and laminated to an extruded aluminum carrier Insert.
				5. UDO Subsurface Copy – Textured .020” clear polycarbonate face with subsurface Direct Print copy. Slides into Window Insert.
				6. Engraved Copy – Extruded ABS Insert painted with acrylic lacquer finish. Copy is engraved into one of the six standard ABS materials exposing desired copy for color.
				7. ADA, Direct Print Tactile Copy – UV/LED-cured, 1/32” thick, direct-print raised characters and fully domed, clear Grade 2 Braille dots, printed on ABS, anodized aluminum, high-pressure laminates, acrylic, or direct-print background graphics Inserts. Background color for painted materials is painted with acrylic lacquer in the specified Insert color. Copy color is UV/LED-cured inks digitally applied directly to the substrate surface.
				8. ADA, Integral Tactile Copy – Graphics and Insert materials are one piece. Tactile Photopolymer Inserts are .080” phenolic photopolymer with raised copy and fully domed Grade 2 Braille dots etched to 1/32”. Background color is painted in acrylic lacquer in the specified Insert color. Top surface of copy characters is then added by roller printing in the specified copy color using Silkscreen inks.
				9. ADA, Applied Tactile Copy – Computer Aided Router cuts acrylic characters 1/32” thick; these are then bonded to ABS, anodized aluminum, high-pressure laminates, acrylic, or direct-print background graphics Inserts using 3M 467 adhesive. Raster method of Braille consists of .059” diameter, fully domed, clear acrylic beads set into pre-drilled holes, resulting in 1/32” Grade 2 Braille text.
				10. ADA, Subsurface Tactile Copy – UV/LED-cured, 1/32” thick, direct-print raised characters reverse printed subsurface to clear, vacuum thermoformable PETG. Materials are put into a Heat Vacuum Applicator (HVA) to form around the three-dimensional graphics, afterwards the fully domed Grade 2 Braille dots are formed. Insert is back sprayed with acrylic lacquer and laminated to an extruded aluminum carrier Insert.
				11. ADA, Exterior Integral Tactile Copy – Graphics and Insert materials are one piece: .015 aluminum pressure bonded with adhesive to .060 acrylic with 1/32” raised copy and fully domed Grade 2 Braille dots, pressure bonded to extruded PVC hooks with adhesive. Background color is painted in acrylic lacquer in the specified Insert color. Top surface of copy characters is then added by roller printing in specified copy color using Silkscreen inks.
			2. TYPOGRAPHY
				1. Copy Option: *SPEC WRITER NOTE: List Copy Option. i.e. Direct Print (DP)*
				2. Copy Color: *SPEC WRITER NOTE: List Copy Color. i.e. White (708)*
				3. Copy Style: *SPEC WRITER NOTE: List Copy Style. i.e. Arial (ARL)*
				4. Copy Size: *SPEC WRITER NOTE: List Copy Size. i.e. 5/8*
				5. Copy Position: *SPEC WRITER NOTE: List Copy Position. i.e. Center (C)*
				6. Copy Case: *SPEC WRITER NOTE: Standard Upper and Lower Case unless specified All Caps or As Typed indicated in the Sign Message Schedule. i.e. All Caps (AC)*

Note: All ADA options are standard All Caps to be compliant.

* + - * 1. Copy shall be a true, clean accurate reproduction of typeface(s) specified.
				2. Letter spacing and in-between line spacing shall be set by manufacturer.
				3. Arrows, symbols, and logo art: To be provided in style, sizes, colors and spacing as shown in drawings.
				4. Braille: Grade 2
				5. Translations: Grade 2 Braille copy, as noted in Sign Message Schedule, is responsibility of the sign manufacturer. Any second language text, as noted in Sign Message Schedule, is responsibility of the customer.
	1. **PLAQUES**
* A Plaque is the Copy Insert material of the 2/90 Slide Modular Sign minus the leg configuration needed to attach to the Structural Rail.
* Plaques are not changeable.
	+ - Plaques shall allow for different mounting devices including pressure sensitive tape, magnetic tape, panel and tile, hook, and other mounting devices as specified. *SPEC WRITER NOTE: List Mounting Option: i.e. Magnetic (B)*
* Wipe clean with a damp cloth. Do not use harsh chemicals or solvents.
	+ 1. PLAQUE MATERIALS:
			1. ABS Plaque - .090” extruded ABS plastic core with .003” UV resistant acrylic cap bonded during extrusion/texturing process. Plaque color is either integral or painted in acrylic lacquer. Finished in a Chromium industries #HM335RA texture pattern to prevent glare and disguise fingerprints.
			2. Aluminum Plaque - .028” coil anodized aluminum and laminated to .090” extruded ABS plastic.
			3. Wood & Stone Plaque - .031” vertical grade laminate and laminated to .090” extruded ABS plastic.
			4. Subsurface Copy Plaque – textured .020” clear polycarbonate face with subsurface Direct Print copy. Insert is back sprayed with acrylic lacquer and laminated to .090” extruded ABS plastic.
			5. Jewel Plaque – .060 non-glare acrylic painted subsurface in acrylic lacquer laminated to .030 ABS with first surface Direct Print, High Performance Cast PVC vinyl, ADA, Direct Print Tactile, or ADA, Applied Tactile copy.
			6. Photo-Luminescent Plaque – Comprised of a 0.065” PVC Strontium-Aluminates laminated with pressure-sensitive permanent acrylic adhesive to .030” ABS material. Photo-luminescent material is light green in color. Material is available in Best Performance Level. Reference Technical Specifications Section 3)h)ii)(1) for Best Level Luminance Test Conditions.
			7. ADA, Direct Print Tactile Plaque – UV/LED-cured, 1/32” thick, direct-print raised characters and fully domed, clear Grade 2 Braille dots, printed on ABS, anodized aluminum, high-pressure laminates, acrylic, or direct-print background graphics Inserts. Background color for painted materials is painted with acrylic lacquer in the specified Insert color. Copy color is UV/LED-cured inks digitally applied directly to the substrate surface.
			8. ADA, Integral Tactile Plaque – Graphics and Plaque materials are one piece. Tactile Photopolymer Inserts are .080” phenolic photopolymer with raised copy and fully domed Grade 2 Braille dots etched to 1/32”. Background color is painted in acrylic lacquer in the specified Insert color. Top surface of copy characters is then added by roller printing in specified copy color using Silkscreen inks.
			9. ADA, Applied Tactile Plaque – Computer Aided Router cuts acrylic characters 1/32” thick; these are then bonded to ABS, anodized aluminum, high-pressure laminates, acrylic, or direct-print background graphics Inserts using 3M 467 adhesive. Raster Method of Braille consists of .059” diameter fully domed, clear acrylic beads set into pre-drilled holes on ABS, anodized aluminum, high-pressure laminate, or acrylic Inserts resulting in 1/32” Grade 2 Braille text.
			10. ADA, Subsurface Tactile Plaque – UV/LED-cured, 1/32” thick, direct-print raised characters reverse printed subsurface to clear, vacuum thermoformable PETG. Materials are put into a Heat Vacuum Applicator (HVA) to form around the three-dimensional graphics, afterwards the fully domed Grade 2 Braille dots are formed. Insert is back sprayed with acrylic lacquer and laminated to a .090 extruded ABS plastic.

* + - 1. ADA, Exterior Integral Tactile Plaque – Graphics and Plaque materials are one piece: .015 aluminum pressure bonded with adhesive to .060 acrylic with 1/32” raised copy and fully domed Grade 2 Braille dots. Background color is painted in acrylic lacquer in the specified Plaque color. Top surface of copy characters is then added by roller printing in specified copy color using Silkscreen inks.
		1. GRAPHIC PROCESS
			1. Type and symbols are to be produced in the following manner:
				1. Direct Print Copy – VOC free, ultra-violet cured inks digitally applied directly to the substrate surface.
				2. Vinyl First Surface Copy – High Performance Cast PVC Vinyl Copy.
				3. Subsurface Copy – Textured .020” clear polycarbonate face with subsurface Direct Print. Insert is back sprayed with acrylic lacquer and laminated to .090” extruded ABS plastic.
				4. Engraved Copy – Extruded ABS Plaque painted with acrylic lacquer finish. Copy is engraved into one of the six standard ABS materials exposing desired copy for color.
				5. ADA, Direct Print Tactile Copy – UV/LED-cured, 1/32” thick, direct-print raised characters and fully domed, clear Grade 2 Braille dots, printed on ABS, anodized aluminum, high-pressure laminates, acrylic, or direct-print background graphics Inserts. Background color for painted materials is painted with acrylic lacquer in the specified Insert color. Copy color is UV/LED-cured inks digitally applied directly to the substrate surface.
				6. ADA, Integral Tactile Copy – Graphics and Insert materials are one piece. Tactile Photopolymer Inserts are .080” phenolic photopolymer with raised copy and fully domed Grade 2 Braille dots etched to 1/32”. Background color is painted in acrylic lacquer in the specified Insert color. Top surface of copy characters is then added by roller printing in the specified copy color using Silkscreen inks.
				7. ADA, Applied Tactile Copy – Computer Aided Router cuts acrylic characters 1/32” thick; these are then bonded to ABS, anodized aluminum, high-pressure laminates, acrylic, or direct-print background graphics Inserts using 3M 467 adhesive. Raster method of Braille consists of .059” diameter, fully domed, clear acrylic beads set into pre-drilled holes, resulting in 1/32” Grade 2 Braille text.
				8. ADA, Subsurface Tactile Copy – UV/LED-cured, 1/32” thick, direct-print raised characters reverse printed subsurface to clear, vacuum thermoformable PETG. Materials are put into a Heat Vacuum Applicator (HVA) to form around the three-dimensional graphics, afterwards the fully domed Grade 2 Braille dots are formed. Insert is back sprayed with acrylic lacquer and laminated to an extruded aluminum carrier Insert.
				9. ADA, Exterior Integral Tactile Copy – Graphics and Insert materials are one piece: .015 aluminum pressure bonded with adhesive to .060 acrylic with 1/32” raised copy and fully domed Grade 2 Braille dots, pressure bonded to extruded PVC hooks with adhesive. Background color is painted in acrylic lacquer in the specified Insert color. Top surface of copy characters is then added by roller printing in specified copy color using Silkscreen inks.
			2. TYPOGRAPHY
				1. Copy Option: *SPEC WRITER NOTE: List Copy Option. i.e. Direct Print (DP)*
				2. Copy Color: *SPEC WRITER NOTE: List Copy Color. i.e. White (708)*
				3. Copy Style: *SPEC WRITER NOTE: List Copy Style. i.e. Arial (ARL)*
				4. Copy Size: *SPEC WRITER NOTE: List Copy Size. i.e. 5/8*
				5. Copy Position: *SPEC WRITER NOTE: List Copy Position. i.e. Center (C)*
				6. Copy Case: *SPEC WRITER NOTE: Standard Upper and Lower Case unless specified All Caps or As Typed indicated in the Sign Message Schedule. i.e. All Caps (AC)*

Note: All ADA options are standard All Caps to be compliant.

* + - * 1. Copy shall be a true, clean accurate reproduction of typeface(s) specified.
				2. Letter spacing to be normal and interline spacing shall be set by manufacturer.
				3. Arrows, symbols, and logo art: To be provided in style, sizes, colors, and spacing as shown in drawings.
				4. Braille: Grade 2
				5. Translations: Grade 2 Braille copy, as noted in Sign Message Schedule, is responsibility of the sign manufacturer. Any second language text, as noted in Sign Message Schedule, is responsibility of the customer.
	1. **PLAQUES PLUS**

The 2/90 Plaques Plus System shall be comprised of three primary components: a Support Back Plate, Plaque, and End Caps.

* Interior sign system is capable of being arranged in a variety of configurations with a minimum of attachments, devices, and connectors.
* Plaques Plus is 9/32” thick and accepts non-changeable plaque on one side only.
* Plaques Plus shall allow for different mounting devices including pressure sensitive tape, magnetic tape, panel and tile, hook, and other mounting devices as specified. *SPEC WRITER NOTE: List Mounting Option: i.e. Hook (F)*
	+ 1. SUPPORT BACK PLATE
			1. The .175 ABS Support Back Plate is the structural member of the sign, extruded from a General Purpose ABS originating from any one of the following: ABS resins, GE 3800, Bayer 7521, GE HXS, LG Chemicals LH-610A, BASF EGP-7.
			2. The ABS Support Back Plate shall accept a front-loaded ABS plastic, anodized aluminum, high-pressure laminate, or acrylic Plaque attached by adhesive.
			3. The Support Back Plate shall allow for different mounting devices including pressure sensitive tape, magnetic tape, panel and tile, hook, and other mounting devices as specified.
		2. PLAQUE
			1. Plaque accepts various forms of copy and graphics and attach to the Support Back Plate by using adhesive.
			2. Plaques are not changeable.
			3. Wipe clean with a damp cloth. Do not use harsh chemicals or solvents.
			4. Plaque Materials:
				1. ABS Plaque – .090” extruded ABS plastic core with .003” UV resistant acrylic cap bonded during extrusion/texturing process. Plaque color is either integral or painted in acrylic lacquer. Finished in a Chromium industries #HM335RA texture pattern to prevent glare and disguise fingerprints.
				2. Aluminum Plaque – .028” coil anodized aluminum and laminated to .060” extruded ABS plastic.
				3. Wood & Stone Plaque – .031” vertical grade laminate and laminated to .060” extruded ABS plastic.
				4. Subsurface Copy Plaque – textured .020” clear polycarbonate face with subsurface Direct Print copy. Insert is back sprayed with acrylic lacquer with a flex additive and laminated to .060” extruded ABS plastic.
				5. Jewel Plaque – .060 non-glare acrylic painted subsurface in acrylic lacquer laminated to .030 ABS with first surface Direct Print, High Performance Cast PVC vinyl, ADA, Direct Print Tactile, or ADA, Applied Tactile copy.
				6. Sliding Plaque – .010” textured polycarbonate with subsurface Direct Print copy. Sliding Plaque moves horizontally with an inset finger press exposing different graphic information.
				7. Photo-Luminescent Plaque – Comprised of a 0.065” PVC Strontium-Aluminates laminated with pressure-sensitive permanent acrylic adhesive to .030” ABS material. Photo-luminescent material is light green in color. Material is available in Best performance level. Reference Technical Specifications Section 3)h)ii)(1) for Best Level Luminance Test Conditions.
				8. ADA, Direct Print Tactile Plaque – UV/LED-cured, 1/32” thick, direct-print raised characters and fully domed, clear Grade 2 Braille dots, printed on ABS, anodized aluminum, high-pressure laminates, acrylic, or direct-print background graphics Inserts. Background color for painted materials is painted with acrylic lacquer in the specified Insert color. Copy color is UV/LED-cured inks digitally applied directly to the substrate surface.
				9. ADA, Integral Tactile Plaque – Graphics and Plaque materials are one piece. Tactile Photopolymer Inserts are .080” phenolic photopolymer with raised copy and fully domed Grade 2 Braille dots etched to 1/32”. Background color is painted in acrylic lacquer in the specified Insert color. Top surface of copy characters is then added by roller printing in specified copy color using Silkscreen inks.
				10. ADA, Applied Tactile Plaque – Computer Aided Router cuts acrylic characters 1/32” thick; these are then bonded to ABS, anodized aluminum, high-pressure laminates, acrylic, or direct-print background graphics Inserts using 3M 467 adhesive. Raster Method of Braille consists of .059” diameter, fully domed, clear acrylic beads set into pre-drilled holes on ABS, anodized aluminum, high-pressure laminate, or acrylic Inserts resulting in 1/32” Grade 2 Braille text.
				11. ADA, Subsurface Tactile Plaque – UV/LED-cured, 1/32” thick, direct-print raised characters reverse printed subsurface to clear, vacuum thermoformable PETG. Materials are put into a Heat Vacuum Applicator (HVA) to form around the three-dimensional graphics, afterwards the fully domed Grade 2 Braille dots are formed. Insert is back sprayed with acrylic lacquer and laminated to a .090 extruded ABS plastic.
				12. ADA, Exterior Integral Tactile Plaque – Graphics and Plaque materials are one piece: .015 aluminum pressure bonded with adhesive to .060 acrylic with 1/32” raised copy and fully domed Grade 2 Braille dots. Background color is painted in acrylic lacquer in the specified Insert color. Top surface of copy characters is then added by roller printing in specified copy color using Silkscreen inks.
		3. END CAPS
			1. End Caps are permanently bonded to the Support Back Plate by a pressure sensitive adhesive forming an integral unit, enclosing, and securing the Copy Plaque.
			2. Extruded in 6063T5 extruded aluminum alloy. Painted with acrylic lacquer in any color.
			3. Seven End Cap styles are optional:
* Round Corner • Square Corner
* Slimline • Angleback
* Stepback • Bullnose
* Waterfall
	+ 1. GRAPHIC PROCESS
			1. Type and symbols are to be produced in the following manner:
				1. Direct Print – VOC free, ultra-violet cured inks digitally applied directly to the substrate surface.
				2. Vinyl First Surface Copy – High Performance Cast PVC Vinyl Copy.
				3. Subsurface Copy – Textured .020” clear polycarbonate face with subsurface Direct Print copy. Insert is back sprayed with acrylic lacquer and laminated to .060” extruded ABS plastic.
				4. Engraved Copy – Extruded ABS Plaque painted with acrylic lacquer finish. Copy is engraved into one of the six standard ABS materials exposing desired copy for color.
				5. ADA, Direct Print Tactile Copy – UV/LED-cured, 1/32” thick, direct-print raised characters and fully domed, clear Grade 2 Braille dots, printed on ABS, anodized aluminum, high-pressure laminates, acrylic, or direct-print background graphics Inserts. Background color for painted materials is painted with acrylic lacquer in the specified Insert color. Copy color is UV/LED-cured inks digitally applied directly to the substrate surface.
				6. ADA, Integral Tactile Copy – Graphics and Insert materials are one piece. Tactile Photopolymer Inserts are .080” phenolic photopolymer with raised copy and fully domed Grade 2 Braille dots etched to 1/32”. Background color is painted in acrylic lacquer in the specified Insert color. Top surface of copy characters is then added by roller printing in the specified copy color using Silkscreen inks.
				7. ADA, Applied Tactile Copy – Computer Aided Router cuts acrylic characters 1/32” thick; these are then bonded to ABS, anodized aluminum, high-pressure laminates, acrylic, or direct-print background graphics Inserts using 3M 467 adhesive. Raster method of Braille consists of .059” diameter, fully domed, clear acrylic beads set into pre-drilled holes, resulting in 1/32” Grade 2 Braille text.
				8. ADA, Subsurface Tactile Copy – UV/LED-cured, 1/32” thick, direct-print raised characters reverse printed subsurface to clear, vacuum thermoformable PETG. Materials are put into a Heat Vacuum Applicator (HVA) to form around the three-dimensional graphics, afterwards the fully domed Grade 2 Braille dots are formed. Insert is back sprayed with acrylic lacquer and laminated to an extruded aluminum carrier Insert.
				9. ADA, Exterior Integral Tactile Copy – Graphics and Insert materials are one piece: .015 aluminum pressure bonded with adhesive to .060 acrylic with 1/32” raised copy and fully domed Grade 2 Braille dots, pressure bonded to extruded PVC hooks with adhesive. Background color is painted in acrylic lacquer in the specified Insert color. Top surface of copy characters is then added by roller printing in specified copy color using Silkscreen inks.
			2. TYPOGRAPHY
				1. Copy Option: *SPEC WRITER NOTE: List Copy Option. i.e. Direct Print (DP)*
				2. Copy Color: *SPEC WRITER NOTE: List Copy Color. i.e. White (708)*
				3. Copy Style: *SPEC WRITER NOTE: List Copy Style. i.e. Arial (ARL)*
				4. Copy Size: *SPEC WRITER NOTE: List Copy Size. i.e. 5/8*
				5. Copy Position: *SPEC WRITER NOTE: List Copy Position. i.e. Center (C)*
				6. Copy Case: *SPEC WRITER NOTE: Standard Upper and Lower Case unless specified All Caps or As Typed indicated in the Sign Message Schedule. i.e. All Caps (AC)*

Note: All ADA options are standard All Caps to be compliant.

* + - * 1. Copy shall be a true, clean accurate reproduction of typeface(s) specified.
				2. Letter spacing and in-between line spacing shall be set by manufacturer.
				3. Arrows, symbols, and logo art: To be provided in style, sizes, colors, and spacing as shown in drawings.
				4. Braille: Grade 2
				5. Translations: Grade 2 Braille copy, as noted in Sign Message Schedule, is responsibility of the sign manufacturer. Any second language text, as noted in Sign Message Schedule, is responsibility of the customer.
	1. **ARC MODULAR SIGN SYSTEM**

The 2/90 Interchangeable Component Sign System shall be comprised of four primary components: a Curved Face Frame, Edge Rails, Structural Backer, and Copy Insert(s).

* Available in heights and widths based on standard U.S. paper sizes.
* Interior sign system is capable of being configured with a minimum of attachments, devices, and connectors.
* Interchangeable nature of the system will allow for select changes of graphic components of the installed sign, without changing the sign in its entirety.
* Arc shall allow for different mounting devices including adhesive tape, magnetic tape, hook and loop, screw, pin, freestanding, various panel hooks and ceiling options, and other mounting devices as specified. SPEC WRITER NOTE: List Mounting Option: i.e. Screw (D)
	+ 1. ARC FRAME
			1. The Arc Frame allows for the modular, uniform sizing of the sign. It is the structural member of the sign in 22-gauge Black Powder-Coated Steel or painted acrylic lacquer.
			2. Horizontal Arc Frames that exceed 17” in width are ABS. Vertical Arc Frames that exceed 17” in height are ABS.
			3. The Arc Frame shall accept copy Inserts on one side.

Note: Ceiling and Perpendicular mounts accept copy Inserts on both sides.

* + - 1. The Arc Frame shall allow for different mounting devices including pressure sensitive tape, screw mount, freestanding mount and other mounting devices as specified.
		1. EDGE RAILS
			1. Edge Rails are 6063-T5 extruded aluminum in satin anodize or painted with acrylic lacquer.
		2. STRUCTURAL BACKER
			1. Structural Backer is .030” or .060” ABS material depending on sign configuration.
			2. Multiple Inserts within the Arc Frame shall be separated by .060” thick by .125” wide black ABS plastic Accent Strip(s). Accent Strip(s) can be Color-Matched acrylic lacquer or faux-aluminum colors. Accent Strip(s) adheres to Support Insert with acrylic tape.
		3. COPY INSERTS
			1. Copy Inserts accept various forms of copy and graphics and are captured by the Edge Rails.
			2. Copy Inserts are interchangeable by applying suction cup tool to Insert face and pulling out, and to other signs in system of equal width or height.
			3. Wipe clean with a damp cloth. Do not use harsh chemicals or solvents.
			4. *SPEC WRITER NOTE:* *List Insert Size – height by length. i.e. 2x11 Arc. List Insert Color. i.e. Black (704)*
			5. Copy Insert Materials:
				1. Standard Copy Inserts – .040” Non-Glare PETG; Inserts over 17” wide are .060” acrylic. Insert color is painted first surface in acrylic lacquer.
				2. Faux-Aluminum Inserts – .062” ABS sheet with a micro-brushed faux-aluminum surface, precision cut on CNC.
				3. Wood & Stone Inserts – .031” vertical grade laminate precision slit.
				4. Window Inserts – .040” Non-Glare PETG lens with die-cut paper Insert.
				5. Subsurface Copy Inserts – .040” Non-Glare PETG Insert (Inserts over 17” wide use .060” acrylic) with subsurface Direct Print copy. Back sprayed with acrylic lacquer containing a flex additive in specified Insert color.
				6. UDO Subsurface Copy Inserts – .040” Non-Glare PETG Insert (Inserts over 17” wide use .060” acrylic) with subsurface Direct Print copy.
				7. Jewel Inserts – .040 non-glare PETG Insert (Inserts over 17” wide use .060 acrylic) painted subsurface in acrylic lacquer laminated with first surface Direct Print, applied High Performance Cast PVC vinyl, ADA, Direct Print Tactile, or ADA, Applied Tactile copy.
				8. Sliding Inserts – .010” textured polycarbonate with subsurface Direct Print copy.
				9. Photo-Luminescent Inserts – Comprised of a 0.065” PVC Strontium-Aluminates. Photo luminescent material is light green in color. Material is available in Best performance levels. Reference Technical Specifications Section 3)h)ii)(1) for Luminance Test Conditions.
				10. ADA, Direct Print Tactile Inserts – UV/LED-cured, 1/32” thick, direct-print raised characters and fully domed, clear Grade 2 Braille dots, printed on PETG, high-pressure laminates, acrylic, or direct-print background graphics Inserts. Background color for painted materials is painted with acrylic lacquer in the specified Insert color. Copy color is UV/LED-cured inks digitally applied directly to the substrate surface.
				11. ADA, Integral Tactile Inserts – Graphics and Insert materials are one piece. ADA Integral Inserts are .040” PETG-backed Photopolymer with 1/32” raised copy and fully domed Grade 2 Braille. Background color is painted in acrylic lacquer. Top surface of copy characters is then added by roller printing in specified copy color using Silkscreen inks.
				12. ADA, Applied Tactile Inserts – Computer Aided Router cuts acrylic characters 1/32” thick; these are then bonded to PETG, high-pressure laminates, acrylic, or direct-print background graphics Inserts using 3M 467 adhesive. Raster Method of Braille consists of .059” diameter, fully domed, clear acrylic beads set into pre-drilled holes on ABS, anodized aluminum, high-pressure laminate, or acrylic Inserts resulting in 1/32” Grade 2 Braille text.
				13. ADA, Subsurface Tactile Inserts - UV/LED-cured, 1/32” thick, direct-print raised characters reverse printed subsurface to clear, vacuum thermoformable PETG. Materials are placed into a Heat Vacuum Applicator (HVA). The PETG forms around the three-dimensional graphics and is then embossed with fully domed Grade 2 Braille dots. Insert is back sprayed with acrylic lacquer containing flex additive.
		4. ENHANCED BACKERS
			1. Standard Backer – ¼” thick acrylic.
				1. Pattern – modified with a digital receptive polymer to accept VOC free, ultra-violet cured inks digitally applied subsurface directly to the substrate.
				2. Solid Color – painted subsurface in acrylic lacquer.
			2. Aluminum Backer – .028” coil anodized aluminum and laminated to .090 extruded ABS plastic.
			3. Wood & Stone Backer – .031” vertical grade laminate and laminated to .090” extruded ABS plastic.
		5. GRAPHIC PROCESS
			1. Type and symbols are to be produced in the following manner:
				1. Direct Print Copy – VOC free, ultra-violet cured inks digitally applied directly to the substrate surface.
				2. Vinyl First Surface Copy – High Performance Cast PVC Vinyl Copy.
				3. Laser Print Copy – Computer generated graphics laser printed on die-cut paper Inserts.
				4. Subsurface Copy – .040” Non-Glare PETG with subsurface Direct Print copy. Insert is back sprayed with acrylic lacquer.
				5. UDO Subsurface Copy – .040” Non-Glare PETG Insert (Inserts over 17” wide use .060” acrylic) with subsurface Direct Print copy.
				6. ADA, Direct Print Tactile Copy – UV/LED-cured, 1/32” thick, direct-print raised characters and fully domed, clear Grade 2 Braille dots, printed on PETG, high-pressure laminates, acrylic, or direct-print background graphics Inserts. Background color for painted materials is painted with acrylic lacquer in the specified Insert color. Copy color is UV/LED-cured inks digitally applied directly to the substrate surface.
				7. ADA, Integral Tactile Copy – Graphics and Insert materials are one piece. Inserts are one piece molded .040” PETG-backed photopolymer with 1/32” raised copy and fully domed Grade 2 Braille dots. Background color is painted in acrylic lacquer in the specified Insert color. Top surface of copy characters is then added by roller printing in specified copy color using Silkscreen inks.
				8. ADA, Applied Tactile Copy – Computer Aided Router cuts acrylic characters 1/32” thick; these are then bonded to PETG, high-pressure laminates, acrylic, or direct-print background graphics Inserts using 3M 467 adhesive. Raster method of Braille consists of .059” diameter, fully domed, clear acrylic beads set into pre-drilled holes, resulting in 1/32” Grade 2 Braille text.
				9. ADA Subsurface Tactile Copy – UV/LED-cured, 1/32” thick, direct-print raised characters reverse printed subsurface to clear, vacuum thermoformable PETG. Materials are placed into a Heat Vacuum Applicator (HVA). The PETG forms around the three-dimensional graphics and is then embossed with fully domed Grade 2 Braille dots. Insert is back sprayed with acrylic lacquer containing flex additive.
			2. TYPOGRAPHY
				1. Copy Option: *SPEC WRITER NOTE: List Copy Option. i.e. Direct Print (DP)*
				2. Copy Color: *SPEC WRITER NOTE: List Copy Color. i.e. White (708)*
				3. Copy Style: *SPEC WRITER NOTE: List Copy Style. i.e. Arial (ARL)*
				4. Copy Size: *SPEC WRITER NOTE: List Copy Size. i.e. 5/8*
				5. Copy Position: *SPEC WRITER NOTE: List Copy Position. i.e. Center (C)*
				6. Copy Case: *SPEC WRITER NOTE: Standard Upper and Lower Case unless specified All Caps or As Typed indicated in the Sign Message Schedule. i.e. All Caps (AC)*

Note: All ADA options are standard All Caps to be compliant.

* + - * 1. Copy shall be a true, clean accurate reproduction of typeface(s) specified.
				2. Letter spacing to be normal and interline spacing shall be set by manufacturer.
				3. Arrows, symbols, and logo art: To be provided in style, sizes, colors, and spacing as shown in drawings.
				4. Braille: Grade 2
				5. Translations: Grade 2 Braille copy, as noted in Sign Message Schedule, is responsibility of the sign manufacturer. Any second language text, as noted in Sign Message Schedule, is responsibility of the customer.
	1. **KLIK MODULAR SIGN SYSTEM**

General:

* Provide products produced by 2/90 Sign Systems. Klik Wayfinding Signage is a modular architectural system with front-loading, changeable message Inserts. Pre-determined sign sizes within the family of signs constitutes an offering suitable for any facility.
* The Klik Interchangeable Component Sign System shall be comprised of four primary components: Support Baseplate, Removable Copy Insert(s), Interlocking Klik insert tabs, and a mounting option.
* Sign type families are identified by numbers and letters, which identify the style of sign, approximate size of the sign, height by width, along with a configuration of Inserts. i.e. KWS46B is a 4x6 Klik Workstation Sign with (1) 2” x 6” ADA Header Insert and (1) 2” x 6” Direct Print Insert.
* Sign Type: *SPEC WRITER NOTE: List the Part Number of all signs required. i.e. KRS86A*
* Interior sign system is capable of being arranged in a variety of configurations with a minimum of attachments, devices, and connectors.
* Interchangeable nature of the system will allow for changes of graphic components of the installed sign, without changing sign in its entirety.
	+ 1. SUPPORT BASEPLATE
			1. The support baseplate has machined holes spaced to allow uniform, modular sizing of Inserts. This internal structural member of the sign is extruded acrylic and is painted.
			2. The support baseplate may accept an acrylic, phenolic photopolymer, or aluminum Window Insert, depending upon sign style.
			3. The support baseplate shall allow for different mounting devices including screw mount, adhesive/pressure sensitive tape, freestanding mount, fabric panel mount, and other mounting devices as specified. *SPEC WRITER NOTE: List Mounting Option. i.e. Adhesive (A)*
		2. COPY INSERTS
			1. Copy Inserts accept various forms of copy and graphics and attach to the support baseplate with interlocking Klik tabs.
			2. Copy Inserts are interchangeable by inserting the Klik tool between insert and baseplate. Releasing Klik locking tab and sliding insert to the left and lifting away from baseplate.
			3. Wipe clean with a water-dampened cloth. Do not use chemicals or solvents.
			4. *SPEC WRITER NOTE:* *List Insert Size – height by length. i.e. 2” x 8 ½” and Style i.e. Window Insert.*
			5. *SPEC WRITER NOTE: List Insert Color. i.e. Silver*
			6. Copy Insert Materials:
				1. Inserts - 3/16” acrylic bonded to Klik locking and non-locking tabs with VHB pressure sensitive adhesive.
				2. Window Inserts – Extruded 6063-T5 aluminum with Klik locking and non-locking tabs or adhesive tape connected to Support Baseplate. Color is painted acrylic lacquer. Inserts hold die-cut paper insert with a clear .060 acrylic lens. Lens is held in place w/set screw from the bottom.
				3. ADA, Direct Print Tactile Inserts – UV/LED-cured, 1/32” thick, direct-print raised characters and fully domed, clear Grade 2 Braille dots, printed onto acrylic. Background color for painted materials is painted with acrylic lacquer in the specified Insert color. Copy color is UV/LED-cured inks digitally applied directly to the substrate surface.
				4. Sliding Inserts – acrylic insert taped to frame holding .040” textured polycarbonate slider with Red/Green designation painted subsurface. Sliding Insert moves horizontally.
				5. Ceiling and Perpendicular Mounted signs – 3/8” expanded PVC interlocking with Extruded 6063-T5 aluminum mounting bracket with mounting hardware.
		3. ENHANCED BACKERS
			1. Backer plate applied with adhesive to back of sign.
			2. Enhanced Backer Materials:
				1. Standard Backer – ¼” thick acrylic.

Pattern – modified with a digital receptive polymer to accept VOC free, ultra-violet cured inks digitally applied subsurface directly to the substrate.

Solid Color – painted subsurface in acrylic lacquer.

* + - * 1. Aluminum Backer – .028” coil anodized aluminum and laminated to .090 extruded ABS plastic.
				2. Wood & Stone Backer – .031” vertical grade laminate and laminated to .090” extruded ABS plastic.
		1. GRAPHIC PROCESS
			1. Type and symbols are to be produced in the following manner:
				1. Direct Print Copy – VOC free, ultra-violet cured inks digitally applied directly to the substrate surface. *SPEC WRITER NOTE: only available in matte finish. i.e. 715 Yellow is matte.*
				2. Vinyl First Surface Copy – High Performance Cast PVC Vinyl Copy. *SPEC WRITER NOTE: 700 series is matte finish; 200 series is gloss finish. i.e. 715 Yellow is matte; 215 Yellow is gloss.*
				3. Laser Print Copy – Computer generated graphics laser printed on die-cut paper Insert.
				4. ADA, Direct Print Tactile Copy – UV/LED-cured, 1/32” thick, direct-print raised characters and fully domed, clear Grade 2 Braille dots, printed on acrylic. Background color for painted materials is painted with acrylic lacquer in the specified Insert color. Copy color is UV/LED-cured inks digitally applied directly to the substrate surface.
			2. TYPOGRAPHY
				1. Copy Option: *SPEC WRITER NOTE: List Copy Option. i.e. Direct Print (DP)*
				2. Copy Color: *SPEC WRITER NOTE: List Copy Color. i.e. White (708)*
				3. Copy Style: *SPEC WRITER NOTE: List Copy Style. i.e. Arial (ARL)*
				4. Copy Size: *SPEC WRITER NOTE: List Copy Size. i.e. 5/8*
				5. Copy Position: *SPEC WRITER NOTE: List Copy Position. i.e. Center (C)*
				6. Copy Case: *SPEC WRITER NOTE: Standard Upper and Lower Case unless specified All Caps or As Typed indicated in the Sign Message Schedule. i.e. All Caps (AC)*

Note: All ADA options are standard All Caps to be compliant.

* + - * 1. Copy shall be a true, clean accurate reproduction of typeface(s) specified.
				2. Letter spacing and in-between line spacing shall be set by manufacturer.
				3. Arrows, symbols, and logo art: To be provided in style, sizes, colors, and spacing as shown in drawings.
				4. Braille: Grade 2
				5. Translations: Grade 2 Braille copy, as noted in Sign Message Schedule, is responsibility of the sign manufacturer. Any second language text, as noted in Sign Message Schedule, is responsibility of the customer.
	1. **SAFECARE SIGNAGE**
* Comprised of three primary components: polycarbonate back plate, subsurface thermoformed copy, and polycarbonate front plate.
* A lightweight sign with no hard edges or movable parts (\* slider is designed to move back and forth displaying availability message).
* Is available with Laser Print Paper Insert Option to allow for changes of graphics installed on the sign without changing the sign in its entirety.
* Installed with tamper resistant Pin-in-Head Torx mechanical fasteners and silicone adhesive.
	+ 1. PRODUCT MATERIALS
			1. Subsurface Copy Signs - VOC free, ultra-violet cured inks printed subsurface to clear, polycarbonate front plate or PETG. Insert is back sprayed with acrylic lacquer and taped to polycarbonate back plate with Tesa Tape and encapsulated by polycarbonate front plate.
			2. Subsurface Copy Signs with Laser Print Removable Paper Inserts – Front Plates of signs utilizing 2/90 Paper Insert are masked prior to painting to show a viewable area. Pocketed area is created by .060 ABS spacer above and below the viewable area with adhesive on both sides to join the subsurface copy polycarbonate face to the .060 support Insert which has also been back sprayed with acrylic lacquer with flex additive.
			3. ADA, Subsurface Tactile Signs – UV/LED-cured, 1/32” thick, direct-print raised characters reverse printed subsurface to clear, vacuum thermoformable PETG. Materials are put into a Heat Vacuum Applicator (HVA) to form around the three-dimensional graphics, afterwards the fully domed Grade 2 Braille dots are formed. Insert is back sprayed with acrylic lacquer and taped to polycarbonate back plate with Tesa Tape and encapsulated by polycarbonate front plate.
		2. GRAPHIC PROCESS
			1. Type and symbols are to be produced in the following manner:
				1. Subsurface Copy – VOC free, ultra-violet cured inks printed subsurface to clear, polycarbonate front plate or PETG. Insert is back sprayed with acrylic lacquer and taped to polycarbonate back plate with Tesa Tape and encapsulated by polycarbonate front plate.
				2. Laser Print Copy – Computer generated graphics laser printed on die-cut paper Insert.
				3. ADA, Subsurface Tactile Copy – UV/LED-cured, 1/32” thick, direct-print raised characters reverse printed subsurface to clear, vacuum thermoformable PETG. Materials are put into a Heat Vacuum Applicator (HVA) to form around the three-dimensional graphics, afterwards the fully domed Grade 2 Braille dots are formed. Insert is back sprayed with acrylic lacquer and taped to polycarbonate back plate with Tesa Tape and encapsulated by polycarbonate front plate.
		3. TYPOGRAPHY
			1. Copy Option: *SPEC WRITER NOTE: List Copy Option. i.e. Direct Print (DP)*
			2. Copy Color: *SPEC WRITER NOTE: List Copy Color. i.e. White (708)*
			3. Copy Style: *SPEC WRITER NOTE: List Copy Style. i.e. Arial (ARL)*
			4. Copy Size: *SPEC WRITER NOTE: List Copy Size. i.e. 5/8*
			5. Copy Position: *SPEC WRITER NOTE: List Copy Position. i.e. Center (C)*
			6. Copy Case: *SPEC WRITER NOTE: Standard Upper and Lower Case unless specified All Caps or As Typed indicated in the Sign Message Schedule. i.e. All Caps (AC)*

Note: All ADA options are standard All Caps to be compliant.

* + - 1. Copy shall be a true, clean accurate reproduction of typeface(s) specified.
			2. Letter spacing and in-between line spacing shall be set by manufacturer.
			3. Arrows, symbols, and logo art: To be provided in style, sizes, colors, and spacing as shown in drawings.
			4. Braille: Grade 2
			5. Translations: Grade 2 Braille copy, as noted in Sign Message Schedule, is responsibility of the sign manufacturer. Any second language text, as noted in Sign Message Schedule, is responsibility of the customer.
	1. **FLXSIGN**
* FlxSign is a lightweight and pliable sign with no hard edges or movable parts.
* FlxSign is available with Laser Print Paper Insert Window Option.
* Tesa Tape is applied on the back side for field application.
	+ 1. PRODUCT MATERIALS
			1. Subsurface Copy Signs – UV/LED-cured, direct-print characters, reverse printed subsurface to clear, vacuum thermoformable PETG. Insert is back sprayed with acrylic lacquer.
			2. Subsurface Copy Signs with Paper Insert Window – UV/LED-cured, direct-print characters, reverse printed subsurface to clear, vacuum thermoformable PETG. Insert is back sprayed with acrylic lacquer and laminated to .015” Flex support insert. Windows are masked prior to painting to show a viewable area. Pocketed area is created by .030 ABS spacer above and below the viewable area with adhesive on both sides to join the FLX Insert to the .015 FLX support Insert back sprayed with acrylic lacquer with flex additive.
		2. GRAPHIC PROCESS
			1. Type and symbols are to be produced in the following manner:
				1. Subsurface Copy – VOC free, ultra-violet cured inks printed subsurface to clear PETG.
				2. Laser Print Copy - Computer generated graphics laser printed on die-cut paper Inserts for Windows.
				3. ADA, Subsurface Tactile Copy – UV/LED-cured, 1/32” thick, direct-print raised characters reverse printed subsurface to clear, vacuum thermoformable PETG. Materials are put into a Heat Vacuum Applicator (HVA) to form around the three-dimensional graphics, afterwards the fully domed Grade 2 Braille dots are formed. Insert is back sprayed with acrylic lacquer.
			2. TYPOGRAPHY
				1. Copy Option: *SPEC WRITER NOTE: List Copy Option. i.e. Direct Print (DP)*
				2. Copy Color: *SPEC WRITER NOTE: List Copy Color. i.e. White (708)*
				3. Copy Style: *SPEC WRITER NOTE: List Copy Style. i.e. Arial (ARL)*
				4. Copy Size: *SPEC WRITER NOTE: List Copy Size. i.e. 5/8*
				5. Copy Position: *SPEC WRITER NOTE: List Copy Position. i.e. Center (C)*
				6. Copy Case: *SPEC WRITER NOTE: Standard Upper and Lower Case unless specified All Caps or As Typed indicated in the Sign Message Schedule. i.e. All Caps (AC)*

Note: All ADA options are standard All Caps to be compliant.

* + - * 1. Copy shall be a true, clean accurate reproduction of typeface(s) specified.
				2. Letter spacing and in-between line spacing shall be set by manufacturer.
				3. Arrows, symbols, and logo art: To be provided in style, sizes, colors, and spacing as shown in drawings.
				4. Braille: Grade 2
				5. Translations: Grade 2 Braille copy, as noted in Sign Message Schedule, is responsibility of the sign manufacturer. Any second language text, as noted in Sign Message Schedule, is responsibility of the customer.
	1. **GLOSIGN – PHOTO-LUMINESCENT EGRESS SYSTEM**
* The 2/90 Photo-Luminescent Egress System is comprised of three primary components: Photo luminescent Exit signage, Photo-Luminescent Copy Insert material, and Photo-Luminescent Tapes.
	+ 1. PHOTO-LUMINESCENT EXIT PLAQUE (UL 924 Listed)

UL Listed and approved interior plaque system is capable of being arranged in the following manner:

* + - 1. Plaque is comprised of .065” PVC Strontium-Aluminate.
			2. 7.5” x 13” Plaque with 6” EXIT Silkscreen copy in Red or Green or Cast PVC Prismatic Reflective Vinyl in Red or Green.
			3. 10” x 17” Plaque with 8” EXIT Silkscreen copy in Red.

Note: New York City standard is 10” x 17” with 8” EXIT Silkscreen copy in Red only.

* + - 1. Hand-applied directional chevrons in High Performance Cast PVC Vinyl copy painted to match copy color (high-contrast Red or Green).
			2. The Plaque shall allow for # 6 x 1 5/8” Drywall Trim Screws (hardware mount). Sign can utilize standard manufacturing practices.
		1. EXIT SIGN INSERT AND PLAQUE LUMINANCE TEST CONDITIONS
			1. Exit Sign Insert and Plaque material is available in Best performance Level.

|  |
| --- |
| **BEST LEVEL LUMINANCE TEST CONDITIONS** |
| Afterglow 10 min. | Afterglow 60 min. | Decay Time: to .3mcd/m2 |
| 508.0 mcd/m² | 67.0 mcd/m² | 40+ hrs |

* Legible viewing distance: 50 ft.
* Milli-Candela (MCD)
* Charging Time: 54 lux (five foot candles) unfiltered fluorescent light for 60 minutes (UL 924)
* Observational Visibility Test 90 minutes after removal from activating light source
	+ - 1. Compliances:
* UL 924
* NFPA 101-Life Safety Code
* ASTM E 2072-00
* ASTM E 2072-00
* ASTM E 2030-99
	+ - 1. Wipe clean with a damp cloth. Do not use harsh chemicals or solvents.
		1. PHOTO-LUMINESCENT INSERTS
			1. Comprised of a .065” PVC Strontium-Aluminate laminated with pressure-sensitive permanent acrylic adhesive to .030” ABS material. Pressure bonded to extruded PVC hook using high bond, pressure sensitive adhesive. Photo-luminescent material is light green in color. Manufactured in the USA. Material is available in Best performance level.
		2. PHOTO-LUMINESCENT TAPES
			1. .010” Light Green Flexible polyester film laminated with a permanent pressure sensitive adhesive with a poly-coated release liner.
		3. GRAPHIC PROCESS
			1. Direct Print Copy – VOC free, ultra-violet cured inks digitally applied directly to the substrate surface.
			2. Vinyl First Surface Copy – High Performance Cast PVC Vinyl Copy.
			3. ADA, Direct Print Tactile Copy – UV/LED-cured, 1/32” thick, direct-print raised characters and fully domed, clear Grade 2 Braille dots, printed on the substrate surface. Copy color is UV/LED-cured inks digitally applied directly to the substrate surface.
			4. TYPOGRAPHY
				1. Copy Option: *SPEC WRITER NOTE: List Copy Option. i.e. Direct Print (DP)*
				2. Copy Color: *SPEC WRITER NOTE: List Copy Color. i.e. White (708)*
				3. Copy Style: *SPEC WRITER NOTE: List Copy Style. i.e. Arial (ARL)*
				4. Copy Size: *SPEC WRITER NOTE: List Copy Size. i.e. 5/8*
				5. Copy Position: *SPEC WRITER NOTE: List Copy Position. i.e. Center (C)*
				6. Copy Case: *SPEC WRITER NOTE: Standard Upper and Lower Case unless specified All Caps or As Typed indicated in the Sign Message Schedule. i.e. All Caps (AC)*

*Note: All ADA options are standard All Caps to be compliant.*

* + - * 1. Copy shall be a true, clean accurate reproduction of typeface(s) specified.
				2. Letter spacing to be normal and interline spacing shall be set by manufacturer.
				3. Arrows, symbols, and logo art: To be provided in style, sizes, colors, and spacing as shown in drawings.
				4. Braille: Grade 2
				5. Translations: Grade 2 Braille copy, as noted in Sign Message Schedule, is responsibility of the sign manufacturer. Any second language text, as noted in Sign Message Schedule, is responsibility of the customer.
1. **FABRICATION**
	1. Design components allow for expansion and contraction for a minimum material temperature range of 56 degrees C (100 degrees F), without causing buckling, excessive opening of joints, or over stressing of adhesives and fasteners.
	2. Form work to required shapes and sizes, with true curves, lines, and angles. Provide necessary rebates, lugs, and brackets for assembly of units.
	3. Contact surfaces of connected members must be true. Assembled so joints will be tight and practically unnoticeable, without use of filling compound.
	4. Signs shall have fine, even texture and be flat and sound. Lines and miters sharp, arises unbroken, profiles accurate and ornament true to pattern. Plane surfaces should be smooth, flat and without oil-canning, free of rack and twist. Maximum variation from plane of surface plus or minus .032”. Restore texture to filled or cut areas.
	5. Level or straighten wrought work. Members shall have sharp lines and angels and smooth surfaces.
	6. Extruded members to be free from extrusion marks. Square turns and corners sharp, curves true.
	7. Conceal fastenings where possible. Exposed ends and edges mill smooth, with corners slightly rounded.
	8. All painted surfaces properly primed. Finish coating of paint to have complete coverage with no light or thin applications allowing substrate or primer to show. Parts are checked for approval against the color match master chip. Finished surface smooth, free of scratches, gouges, drips, bubbles, thickness variations, foreign matter, and other imperfections.
	9. Movable parts, including hardware, are to be cleaned and adjusted to operate as designed without binding or deformation of members. Doors and covers centered in opening of frame. All contact surfaces fit tight and even without forcing or warping components.
	10. Shop fabricates so far as practical and pre-assemble items to greatest extent possible to minimize field splicing and assembly. Disassemble units only as necessary for shipping and handling limitations. Clearly mark units for re-assembly and coordinated installation.

**PART 3 – EXECUTION**

1. **INSTALLATION**
	1. Protect products against damage during field handling and installation. Protect adjacent existing and newly placed construction as necessary to prevent damage during installation. Paint and touch-up any exposed fasteners and connecting hardware to match color and finish of surrounding surface.
	2. Mount signs in proper alignment, level and plumb according to the sign location plan and the dimensions given on elevation and sign location drawings. Where otherwise not dimensioned, signs shall be installed where best suited to provide a consistent appearance throughout the project. When exact position, angle, height or location is in doubt, contact Architect for clarification.
	3. At completion of sign installation, clean exposed sign surfaces. Clean and repair any adjoining surfaces that became soiled or damaged as a result of installation of signs.
	4. Locate signs as shown on the Sign Location Plan.
	5. At completion of installation, turn over any additional stock of signs and sign components listed in the Sign Message Schedule.
2. **SIGN MESSAGE SCHEDULE**
	1. The Sign Message Schedule and Sign Location Plans are inter-related documents. These documents represent location, type, and total number of signs required.
	2. Contractors shall clarify any perceived irregularities in the Sign Message Schedule.
	3. *SPEC WRITER NOTE: Insert the Sign Message Schedule in this location in the specification and it should contain, at minimum, the following information.*
		1. *Location reference number of the sign within or on the building as shown on the Sign Location Drawing.*
		2. *The text message, arrow, or symbol on the sign.*
		3. *The type of sign (part number & style) to go in/on/at this specific location identified by the location reference number.*
		4. *The size of the sign the message is to appear as shown on the Sign Location Drawings.*
		5. *Reference to the mounting or installation requirements as shown in the drawings.*
		6. *Any special notations or remarks providing classifications and general information regarding a specific sign at a particular location.*

**TECHNICAL SPECIFICATIONS**

**1) SLIDE MODULAR SIGN SYSTEM**

* 1. RAILS

Internal Structural Rails

Extruded Aluminum 6063 Alloy, T-5 Temper, Anodized Black

* 1. INSERTS

ABS Inserts

.090” extruded ABS plastic core with .003” KORAD acrylic cap bonded during the extrusion/texturing process.

Painted ABS Inserts are sprayed with PPG Automotive Acrylic Lacquer. Interior and exterior applications. UV resistant. Fade resistant to 5 years.

Aluminum Inserts

.028" coil anodized brushed aluminum is precision slit and pressure bonded to an extruded aluminum carrier using TESA 4970 adhesive.

Wood & Stone Laminate Inserts

.031” wood and stone laminate is precision slit and pressure bonded to an aluminum carrier using TESA 4970 adhesive.

Window Inserts

Extruded 6063-T5 aluminum with integral hooks for connection to Structural Rail. Color is anodized black, anodized satin or painted acrylic lacquer. Inserts hold die-cut paper insert with a clear .020” textured polycarbonate lens.

Acrylic Windows

.060” non-glare acrylic bonded to .030 ABS and pressure bonded to extruded hook or magnetic tape.

Subsurface Inserts

Textured .020” clear polycarbonate face with subsurface Direct Print copy. Insert is back sprayed with acrylic lacquer and laminated to an extruded aluminum Carrier Insert.

UDO Subsurface Inserts

Textured .020” clear polycarbonate face with subsurface Direct Print copy which slides into Window Insert.

Jewel Inserts

.060 non-glare acrylic painted subsurface in acrylic lacquer laminated to .030 ABS pressure bonded to extruded PVC hook using high bond, pressure sensitive adhesive with first surface Direct Print, High Performance Cast PVC vinyl, ADA, Direct Print Tactile, or ADA, Applied Tactile copy.

Sliding Inserts

Extruded 6063-T5 aluminum with a black, or anodized satin finish with integral hooks for connection with Structural Rail. Holds .010” textured polycarbonate with subsurface Direct Print copy. Sliding Insert moves horizontally with an inset finger press exposing different graphic information.

Photo-Luminescent Inserts

Comprised of a 0.065” PVC Strontium-Aluminate laminated with pressure-sensitive permanent acrylic adhesive to .030” ABS material. Pressure bonded to extruded PVC hook using high bond, pressure sensitive adhesive. Photo-luminescent material is light green in color. Material is available in the Best performance level.

| BEST LEVEL LUMINANCE DIN 67510 Test |
| --- |
|  | Reading @ 10 min. | Reading @ 60 min. | Decay Time to .03 mcd/m² |
| Best | 508 | 67 | 40+ hrs |

Fire Rating

UL94

Flame Spread

UL94HB

Smoke Development

NVS Smoke Test/E84 Steinner Tunnel Test: 450 smoke density. Begins smoking upon ignition.

ADA, Direct Print Tactile Inserts

UV/LED-cured, 1/32” thick, direct-print raised characters and fully domed, clear Grade 2 Braille dots, printed on ABS, anodized aluminum, high-pressure laminates, acrylic, or direct-print background graphics Inserts. Background color for painted materials is painted with acrylic lacquer in the specified Insert color. Copy color is UV/LED-cured inks digitally applied directly to the substrate surface.

ADA, Integral Tactile Inserts

Graphics and Insert materials are one piece. Tactile Photopolymer Inserts are .080” phenolic photopolymer with raised copy and fully domed Grade 2 Braille dots etched to 1/32” and pressure bonded to extruded PVC hooks with adhesive. Background color is painted in acrylic lacquer in the specified Insert color. Top surface of copy characters is then added by roller printing in the specified copy color using Silkscreen inks.

ADA, Applied Tactile Inserts

Computer Aided Router cuts acrylic characters 1/32” thick; these are then bonded to ABS, anodized aluminum, high-pressure laminates, acrylic, or direct-print background graphics Inserts using 3M 467 adhesive. Raster Method of Braille consists of .059” diameter fully domed, clear acrylic beads set into pre-drilled holes on ABS, anodized aluminum, high-pressure laminate, or acrylic Inserts resulting in 1/32” Grade 2 Braille text.

ADA, Subsurface Tactile Inserts

UV/LED-cured, 1/32” thick, direct-print raised characters reverse printed subsurface to clear, vacuum thermoformable PETG. Materials are put into a Heat Vacuum Applicator (HVA) to form around the three-dimensional graphics, afterwards the fully domed Grade 2 Braille dots are formed. Insert is back sprayed with acrylic lacquer and laminated to an extruded aluminum carrier Insert.

ADA, Exterior Integral Tactile Inserts

Graphics and Insert materials are one piece: .015 aluminum pressure bonded with adhesive to .060 acrylic with 1/32” raised copy and fully domed Grade 2 Braille dots, pressure bonded to extruded PVC hooks with adhesive. Background color is painted in acrylic lacquer in the specified Insert color. Top surface of copy characters is then added by roller printing in the specified copy color using Silkscreen inks.

* 1. END CAPS

ABS

Injection molded, Toyolac 100 General Purpose ABS plastic

Flammability

94HB

Extruded Aluminum

Extruded aluminum 6063, T-5 Temper

Spring Steel Clips

.018” spring steel for Standard, and .020” spring steel clips for Thin, black zinc plated.

* 1. MOUNTS

Wall Mounts

A-Adhesive Tape for smooth, hard surfaces.

D-Screw for rough surfaces and all signs exceeding 100 square inches.

K-Perpendicular to wall. Sign is two-sided and connects to a black anodized aluminum bracket at a 90° angle.

Panel Mounts

B-Magnetic Tape for steel surfaces.

C-Hook and Loop for fabric surfaces.

E- Pin for fabric surfaces.

F-Hook for mounting over furniture panels.

G-Freestanding for displaying on Desktop (additional charge for Thin profile signs exceeding 2” high).

H-Freestanding with Adhesive or Magnetic Tape for displaying on desktop or panel top (additional charge for Thin profile signs exceeding 2” high).

O-Flexible Under-The-Top-Cap Concealed Hook for furniture panels and tiles.

P-Aluminum Concealed Hook for furniture panels and tiles.

R-Saddle for mounting over architectural panels.

S-Side Saddle with Adhesive or Magnetic Tape for mounting on top of furniture panels.

Ceiling Mounts (Standard Profile Only)

I-Suspended Ceiling attaches to gridwork.

J-Hanging Ceiling uses hang line (not included).

M-Direct Ceiling aluminum bracket affixes to ceiling with screws.

N-Rigid-Post Ceiling includes rods to sit sign below ceiling surface (not included in sign price).

* 1. TRIM

Extruded Aluminum

Extruded aluminum 6063, T-5 Temper; Finish anodized or painted acrylic lacquer.

* 1. ENHANCED SIGN BACKERS

Standard Backer – ¼” thick acrylic.

* Pattern – modified with a digital receptive polymer to accept VOC free, ultra-violet cured inks digitally applied subsurface directly to the substrate.
* Solid Color – painted subsurface in acrylic lacquer.

Aluminum Backer

.028” coil anodized aluminum and laminated to .090 extruded ABS plastic.

Wood & Stone Backer

.031” vertical grade laminate and laminated to .090” extruded ABS plastic.

* 1. COPY OPTIONS

First Surface Copy Options

* Direct Print
* 3M High Performance Cast PVC Vinyl

Subsurface Copy Options

* Subsurface
* UDO Subsurface
* Laser Print

Engraved Copy Option

ADA, Tactile Copy Options

* + ADA, Direct Print Tactile
	+ ADA, Applied Tactile
	+ ADA, lntegral Tactile
	+ ADA, Subsurface Tactile
	+ ADA, Exterior Integral Tactile
1. **PLAQUES**

* 1. PLAQUE MATERIAL

ABS Plaque

.090” extruded ABS plastic core with .003” KORAD acrylic cap bonded during the extrusion/texturing process.

Painted ABS Plaques are sprayed with PPG Automotive Acrylic Lacquer. Interior and exterior applications. UV resistant. Fade resistant to 5 years.

Aluminum Plaque

.028" coil anodized brushed aluminum laminated to .090” extruded ABS plastic using TESA 4970 adhesive.

Wood & Stone Laminate Plaque

.031” wood and stone laminate laminated to .090” extruded ABS plastic using TESA 4970 adhesive.

Acrylic Windows

.060” non-glare acrylic bonded with .030” ABS with adhesive to .093 ABS plastic.

Jewel Plaque

.060 non-glare acrylic painted subsurface in acrylic lacquer laminated to .030 ABS with first surface Direct Print, High Performance Cast PVC vinyl, ADA, Direct Print Tactile, or ADA, Applied Tactile copy.

Photo-Luminescent Plaque

Comprised of a 0.065” PVC Strontium-Aluminate laminated with pressure-sensitive permanent acrylic adhesive to .030” ABS material. Photo-luminescent material is light green in color. Material is available in the Best performance level.

| BEST LEVEL LUMINANCE DIN 67510 Test |
| --- |
|  | Reading @ 10 min. | Reading @ 60 min. | Decay Time to .03 mcd/m² |
| Best | 508 | 67 | 40+ hrs |

* + Fire Rating

UL94

* + Flame Spread

UL94HB

* + Smoke Development

NVS Smoke Test/E84 Steinner Tunnel Test: 450 smoke density. Begins smoking upon ignition.

ADA, Direct Print Tactile Plaque

UV/LED-cured, 1/32” thick, direct-print raised characters and fully domed, clear Grade 2 Braille dots, printed on ABS, anodized aluminum, high-pressure laminates, acrylic, or direct-print background graphics Inserts. Background color for painted materials is painted with acrylic lacquer in the specified Insert color. Copy color is UV/LED-cured inks digitally applied directly to the substrate surface.

ADA, Integral Tactile Plaque

Graphics and Plaque materials are one piece. Tactile Photopolymer Inserts are .080” phenolic photopolymer with raised copy and fully domed Grade 2 Braille dots etched to 1/32”. Background color is painted in acrylic lacquer in the specified Insert color. Top surface of copy characters is then added by roller printing in specified copy color using Silkscreen inks.

ADA, Applied Tactile Plaque

Computer Aided Router cuts acrylic characters 1/32” thick; these are then bonded to ABS, anodized aluminum, high-pressure laminates, acrylic, or direct-print background graphics Inserts using 3M 467 adhesive. Raster Method of Braille consists of .059” diameter fully domed, clear acrylic beads set into pre-drilled holes on ABS, anodized aluminum, high-pressure laminate, or acrylic Inserts resulting in 1/32” Grade 2 Braille text.

ADA, Subsurface Tactile Plaque

UV/LED-cured, 1/32” thick, direct-print raised characters reverse printed subsurface to clear, vacuum thermoformable PETG. Materials are put into a Heat Vacuum Applicator (HVA) to form around the three-dimensional graphics, afterwards the fully domed Grade 2 Braille dots are formed. Insert is back sprayed with acrylic lacquer and laminated to a .090 extruded ABS plastic.

ADA, Exterior Integral Tactile Plaque

Graphics and Plaque materials are one piece: .015 aluminum pressure bonded with adhesive to .060 acrylic with 1/32” raised copy and fully domed Grade 2 Braille dots. Background color is painted in acrylic lacquer in the specified Insert color. Top surface of copy characters is then added by roller printing in specified copy color using Silkscreen inks.

* 1. MOUNTS

Wall Mounts

A-Adhesive Tape for smooth, hard surfaces.

D-Screw for rough surfaces and all signs exceeding 100 square inches.

Panel Mounts

B-Magnetic Tape for steel surfaces.

C-Hook and Loop for fabric surfaces.

E- Pin for fabric surfaces.

F-Hook for mounting over furniture panels (additional charge)..

G-Freestanding for displaying on Desktop

H-Freestanding with Adhesive or Magnetic Tape for displaying on desktop or panel top.

O-Flexible Under-The-Top-Cap Concealed Hook for furniture panels and tiles.

P-Aluminum Concealed Hook for furniture panels and tiles.

R-Saddle for mounting over architectural panels.

S-Side Saddle with Adhesive or Magnetic Tape for mounting on top of furniture panels.

Ceiling Mounts

J-Hanging Ceiling uses hang line (not included).

* 1. COPY OPTIONS

First Surface Copy

* Direct Print
* 3M High Performance Cast PVC Vinyl

Subsurface Copy

* Subsurface
* UDO Subsurface

Engraved Copy

ADA, Tactile Copy

* + ADA, Direct Print Tactile
	+ ADA, Applied Tactile
	+ ADA, lntegral Tactile
	+ ADA, Subsurface Tactile
	+ ADA, Exterior Integral Tactile
1. **PLAQUES PLUS**
	1. PLAQUES

ABS Plaque

.090” extruded ABS plastic core with .003” KORAD acrylic cap bonded during the extrusion/texturing process.

Painted ABS Plaque are sprayed with PPG Automotive Acrylic Lacquer. Interior applications. UV resistant. Fade resistant to 5 years.

Aluminum Plaque

.028" coil anodized brushed aluminum laminated to .060” extruded ABS plastic using TESA 4970 adhesive.

Wood & Stone Laminate Plaque

.031” wood and stone laminate laminated to .060” extruded ABS plastic using TESA 4970 adhesive.

Acrylic Window

.060” non-glare acrylic bonded with .030” ABS with adhesive to .093 ABS plastic.

Jewel Plaque

.060 non-glare acrylic painted subsurface in acrylic lacquer laminated to .030 ABS with first surface Direct Print, High Performance Cast PVC vinyl, ADA, Direct Print Tactile, or ADA, Applied Tactile copy.

Photo-Luminescent Plaque

Comprised of a 0.065” PVC Strontium-Aluminate laminated with pressure-sensitive permanent acrylic adhesive to .030” ABS material. Photo-luminescent material is light green in color. Material is available in the Best performance level.

| BEST LEVEL LUMINANCE DIN 67510 Test |
| --- |
|  | Reading @ 10 min. | Reading @ 60 min. | Decay Time to .03 mcd/m² |
| Best | 508 | 67 | 40+ hrs |

* + Fire Rating

UL94

* + Flame Spread

UL94HB

* + Smoke Development

NVS Smoke Test/E84 Steinner Tunnel Test: 450 smoke density. Begins smoking upon ignition.

ADA, Direct Print Tactile Plaque

UV/LED-cured, 1/32” thick, direct-print raised characters and fully domed, clear Grade 2 Braille dots, printed on ABS, anodized aluminum, high-pressure laminates, acrylic, or direct-print background graphics Inserts. Background color for painted materials is painted with acrylic lacquer in the specified Insert color. Copy color is UV/LED-cured inks digitally applied directly to the substrate surface.

ADA, Integral Tactile Plaque

Graphics and Plaque materials are one piece. Tactile Photopolymer Inserts are .080” phenolic photopolymer with raised copy and fully domed Grade 2 Braille dots etched to 1/32”. Background color is painted in acrylic lacquer in the specified Insert color. Top surface of copy characters is then added by roller printing in specified copy color using Silkscreen inks.

ADA, Applied Tactile Plaque

Computer Aided Router cuts acrylic characters 1/32” thick; these are then bonded to ABS, anodized aluminum, high-pressure laminates, acrylic, or direct-print background graphics Inserts using 3M 467 adhesive. Raster Method of Braille consists of .059” diameter fully domed, clear acrylic beads set into pre-drilled holes on ABS, anodized aluminum, high-pressure laminate, or acrylic Inserts resulting in 1/32” Grade 2 Braille text.

ADA, Subsurface Tactile Plaque

UV/LED-cured, 1/32” thick, direct-print raised characters reverse printed subsurface to clear, vacuum thermoformable PETG. Materials are put into a Heat Vacuum Applicator (HVA) to form around the three-dimensional graphics, afterwards the fully domed Grade 2 Braille dots are formed. Insert is back sprayed with acrylic lacquer and laminated to a .090 extruded ABS plastic.

ADA, Exterior Integral Tactile Plaque

Graphics and Plaque materials are one piece: .015 aluminum pressure bonded with adhesive to .060 acrylic with 1/32” raised copy and fully domed Grade 2 Braille dots. Background color is painted in acrylic lacquer in the specified Insert color. Top surface of copy characters is then added by roller printing in specified copy color using Silkscreen inks.

* 1. END CAPS

Extruded Aluminum

Extruded aluminum 6063, T-5 Temper

ABS

Injection molded, Toyolac 100 General Purpose ABS plastic

Flammability

94HB

* 1. MOUNT

WALL MOUNTS

A-Adhesive Tape for smooth, hard surfaces.

PANEL MOUNTS

B-Magnetic Tape for steel surfaces.

C-Hook and Loop for fabric surfaces.

E- Pin for fabric surfaces.

F-Hook for mounting over furniture panels.

G-Freestanding for displaying on Desktop (additional charge).

H-Freestanding with Adhesive or Magnetic Tape for displaying on desktop or panel top (additional charge).

O-Flexible Under-The-Top-Cap Concealed Hook for furniture panels and tiles.

P-Aluminum Concealed Hook for furniture panels and tiles.

R-Saddle for mounting over architectural panels.

S-Side Saddle with Adhesive or Magnetic Tape for mounting on top of furniture panels.

* 1. COPY OPTIONS

First Surface Copy

* Direct Print
* 3M High Performance Cast PVC Vinyl

Subsurface Copy

* Subsurface
* UDO Subsurface

Engraved Copy

ADA, Tactile Copy

* + ADA, Direct Print Tactile
	+ ADA, Applied Tactile
	+ ADA, lntegral Tactile
	+ ADA, Subsurface Tactile
	+ ADA, Exterior Integral Tactile
1. **ARC MODULAR SIGN SYSTEM**
	1. FRAMES

22 gauge steel powder coat epoxy primer and painted with acrylic lacquer.

Horizontal Arc Frames that exceed 17” in width or Vertical Arc Frames that exceed 17” in height are ABS plastic.

* 1. EDGE RAILS

Extruded Aluminum

6063-TS extruded aluminum in anodized satin or painted with acrylic lacquer.

* 1. STRUCTURAL BACKER

.030” ABS plastic material support insert.

Accent Strips

ABS plastic .060” thick by .125” wide bonded to Support Insert using 3M 468 adhesive when multiple Insert configuration is needed.

* 1. MOUNTS

Wall Mounts

A-Adhesive Tape for smooth, hard surfaces.

D-Screw for rough surfaces and all signs exceeding 100 square inches.

K-Perpendicular to wall. Sign is two-sided and connects to a black anodized aluminum bracket at a 90° angle.

Panel Mounts

B-Magnetic Tape for steel surfaces.

C-Hook and Loop for fabric surfaces.

E- Pin for fabric surfaces.

F-Hook for mounting over furniture panels.

G-Freestanding for displaying on Desktop (additional charge for signs exceeding 2” high).

H-Freestanding with Adhesive or Magnetic Tape for displaying on desktop or panel top (additional charge for signs exceeding 2” high).

O-Flexible Under-The-Top-Cap Concealed Hook for furniture panels and tiles.

P-Aluminum Concealed Hook for furniture panels and tiles.

R-Saddle for mounting over architectural panels.

S-Side Saddle with Adhesive or Magnetic Tape for mounting on top of furniture panels.

Ceiling Mounts

I-Suspended Ceiling attaches to gridwork.

J-Hanging Ceiling uses hang line (not included).

M-Direct Ceiling aluminum bracket affixes to ceiling with screws.

N-Rigid-Post Ceiling includes rods to sit sign below ceiling surface (not included in sign price).

* 1. COPY INSERTS

Standard Copy Inserts

Extruded .040 PETG. Painted with PPG Automotive Acrylic Lacquer. Interior and exterior applications. UV resistant. Fade resistant to 5 years.

Faux-Aluminum Inserts

.060” extruded ABS plastic core with .002” faux-aluminum film bonded during extrusion process precision cut on CNC.

Wood & Stone Laminate Inserts

.025” wood and stone laminate is precision slit.

PETG Windows

.040” non-glare PETG lens with die-cut paper insert.

Subsurface Inserts

.040” Non-Glare PETG Insert (Inserts over 17” wide use .060” acrylic) with subsurface Direct Print copy. Back sprayed with acrylic lacquer containing a flex additive in specified Insert color.

UDO Subsurface Inserts

.040” Non-Glare PETG Insert (Inserts over 17” wide use .060” acrylic) with subsurface Direct Print copy.

Jewel Inserts

.040 non-glare PETG Insert (Inserts over 17” wide use .060 acrylic) painted subsurface in acrylic lacquer laminated with first surface Direct Print, applied High Performance Cast PVC vinyl, ADA, Direct Print Tactile, or ADA, Applied Tactile copy.

Sliding Inserts

.010” textured polycarbonate with subsurface Direct Print copy.

Photo-Luminescent Inserts

Comprised of a 0.065” PVC Strontium-Aluminate. Photo-luminescent material is light green in color. Material is only available in the Best performance level.

| BEST LEVEL LUMINANCE DIN 67510 Test |
| --- |
|  | Reading @ 10 min. | Reading @ 60 min. | Decay Time to .03 mcd/m² |
| Best | 508 | 67 | 40+ hrs |

* + Fire Rating

UL94

* + Flame Spread

UL94HB

* + Smoke Development

NVS Smoke Test/E84 Steinner Tunnel Test: 450 smoke density. Begins smoking upon ignition.

ADA, Direct Print Tactile Inserts

UV/LED-cured, 1/32” thick, direct-print raised characters and fully domed, clear Grade 2 Braille dots, printed on PETG, high-pressure laminates, acrylic, or direct-print background graphics Inserts. Background color for painted materials is painted with acrylic lacquer in the specified Insert color. Copy color is UV/LED-cured inks digitally applied directly to the substrate surface.

ADA, Integral Tactile Inserts

Graphics and Insert materials are one piece. ADA Integral Inserts are .040” PETG-backed Photopolymer with 1/32” raised copy and fully domed Grade 2 Braille. Background color is painted in acrylic lacquer. Top surface of copy characters is then added by roller printing in specified copy color using Silkscreen inks.

ADA, Applied Tactile Inserts

Computer Aided Router cuts acrylic characters 1/32” thick; these are then bonded to PETG, high-pressure laminates, acrylic, or direct-print background graphics Inserts using 3M 467 adhesive. Raster Method of Braille consists of .059” diameter fully domed, clear acrylic beads set into pre-drilled holes on PETG, high-pressure laminates, acrylic, or direct-print background graphics Inserts resulting in 1/32” Grade 2 Braille text.

ADA, Subsurface Tactile Inserts

UV/LED-cured, 1/32” thick, direct-print raised characters reverse printed subsurface to clear, vacuum thermoformable PETG. Materials are placed into a Heat Vacuum Applicator (HVA). The PETG forms around the three-dimensional graphics and is then embossed for fully domed Grade 2 Braille. Insert is back sprayed with acrylic lacquer containing flex additive.

* 1. ENHANCED BACKERS

Standard Backer – ¼” thick acrylic.

* Pattern – modified with a digital receptive polymer to accept VOC free, ultra-violet cured inks digitally applied subsurface directly to the substrate.
* Solid Color – painted subsurface in acrylic lacquer.

Aluminum Backer

.028” coil anodized aluminum and laminated to .090 extruded ABS plastic.

Wood & Stone Backer

.031” vertical grade laminate and laminated to .090” extruded ABS plastic.

* 1. COPY OPTIONS

First Surface Copy

* Direct Print
* 3M High Performance Cast PVC Vinyl

Subsurface Copy

* Subsurface
* UDO Subsurface
* Laser Print

ADA, Tactile Copy

* ADA, Direct Print Tactile
* ADA, Applied Tactile
* ADA, lntegral Tactile
* ADA, Subsurface Tactile
1. **KLIK MODULAR SIGN SYSTEM**
	1. BASEPLATE

1/4” Acrylic painted with automotive paints. Interior applications and UV resistant. Fade resistant to 3 years.

* 1. INSERTS

Acrylic

3/16” acrylic painted with automotive paints. Interior applications and UV resistant. Fade resistant to 5 years.

Window Inserts

Extruded 6063-T5 aluminum mechanically fastened to .040 aluminum baseplate. Primed and painted with automotive paints. Lens is .060 acrylic held in place with set screw. Connected to support baseplate with Klik Snaps or adhesive tape.

* 1. MOUNTS

Wall Mounts

A-Adhesive Tape for smooth, hard surfaces.

D-Screw for rough surfaces and all signs exceeding 100 square inches.

K-Perpendicular to wall. Sign is two-sided and connects to a black anodized aluminum bracket at a 90° angle.

Panel Mounts

B-Magnetic Tape for steel surfaces.

C-Hook and Loop for fabric surfaces.

E- Pin for fabric surfaces.

F-Hook for mounting over furniture panels.

G-Freestanding for displaying on Desktop (additional charge for signs exceeding 2” high).

H-Freestanding with Adhesive or Magnetic Tape for displaying on desktop or panel top (additional charge for signs exceeding 2” high).

O-Flexible Under-The-Top-Cap Concealed Hook for furniture panels and tiles.

P-Aluminum Concealed Hook for furniture panels and tiles.

R-Saddle for mounting over architectural panels.

S-Side Saddle with Adhesive or Magnetic Tape for mounting on top of furniture panels.

Ceiling Mounts

J-Hanging Ceiling uses hang line (not included).

M-Direct Ceiling aluminum bracket affixes to ceiling with screws.

N-Rigid-Post Ceiling includes rods to sit sign below ceiling surface (not included in sign price).

* 1. COPY

Direct Print Copy

VOC free, ultra-violet cured inks digitally applied directly to the Insert surface.

Laser Print Copy

Computer generated graphics laser printed black on die-cut paper Insert for Windows.

ADA, Direct Print Tactile Copy

UV/LED-cured, 1/32” thick, direct-print raised characters and fully domed, clear Grade 2 Braille dots, printed on acrylic. Background color for painted materials is painted with acrylic lacquer in the specified Insert color. Copy color is UV/LED-cured inks digitally applied directly to the substrate surface.

* 1. FREESTANDING SIGNS

Window insert taped to support baseplate. Baseplate mechanically fastened to Extruded 6063-T5 aluminum post and 1/4” Aluminum Base. Sign is primed and painted with automotive paints. Lens is .060 acrylic held in place with set screw.

* 1. CEILING/PERPENDICULAR SIGNS

3/8” expanded PVC interlocking with Extruded 6063-T5 aluminum mounting bracket with hardware. Mounting bracket, visible mounting screws and sign is primed and painted with automotive paints.

1. **SAFECARE SIGNS**
* Comprised of three primary components: polycarbonate back plate, subsurface thermoformed copy, and polycarbonate front plate.
* A lightweight sign with no hard edges or movable parts (\* slider is designed to move back and forth displaying availability message).
* Is available with Laser Print Paper Insert Option to allow for changes of graphics installed on the sign without changing the sign in its entirety.
	1. SIGN MATERIALS

Subsurface Copy Signs

VOC free, ultra-violet cured inks printed subsurface to clear, polycarbonate front plate or PETG. Insert is back sprayed with acrylic lacquer and taped to polycarbonate back plate with Tesa Tape and encapsulated by polycarbonate front plate.

Subsurface Copy Sign with Laser Print Removable Paper Inserts

Front Plates of signs utilizing 2/90 Paper Insert are masked prior to painting to show a viewable area. Pocketed area is created by .060 ABS spacer above and below the viewable area with adhesive on both sides to join the subsurface copy polycarbonate face to the .060 support Insert which has also been back sprayed with acrylic lacquer with flex additive.

ADA, Subsurface Tactile Signs

UV/LED-cured, 1/32” thick, direct-print raised characters reverse printed subsurface to clear, vacuum thermoformable PETG. Materials are put into a Heat Vacuum Applicator (HVA) to form around the three-dimensional graphics, afterwards the fully domed Grade 2 Braille dots are formed. Insert is back sprayed with acrylic lacquer and taped to polycarbonate back plate with Tesa Tape and encapsulated by polycarbonate front plate.

* 1. MOUNT

Installed with tamper resistant Pin-in-Head Torx mechanical fasteners and silicone adhesive.

* 1. COPY OPTIONS

Subsurface Copy

* + - Subsurface
		- Laser Print

ADA, Tactile Copy

* + - ADA, Subsurface Tactile
1. **FLXSIGN**
	1. SIGN MATERIALS
		* Subsurface Copy Signs – UV/LED-cured, direct-print characters, reverse printed subsurface to clear, vacuum thermoformable PETG. Insert is back sprayed with acrylic lacquer.
		* Subsurface Copy Signs with Paper Insert Window – UV/LED-cured, direct-print characters, reverse printed subsurface to clear, vacuum thermoformable PETG. Insert is back sprayed with acrylic lacquer and laminated to .015” Flex support insert. Windows are masked prior to painting to show a viewable area. Pocketed area is created by .030 ABS spacer above and below the viewable area with adhesive on both sides to join the FLX Insert to the .015 FLX support Insert back sprayed with acrylic lacquer with flex additive.
	2. MOUNT

Tesa Tape is applied on the back side for field application.

* 1. COPY OPTIONS

Subsurface Copy

* + - * Subsurface
			* Laser Print

ADA, Tactile Copy

* ADA, Subsurface Tactile
1. **GLOSIGN – PHOTO-LUMINESCENT EGRESS SYSTEM**
	1. EXIT SIGN PLAQUE LUMINANCE TEST CONDITIONS
		* Exit Sign Plaque material is only available in Best Performance Level.

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| **BEST LEVEL LUMINANCE TEST CONDITIONS** |
| Afterglow 10 min. | Afterglow 60 min. | Decay Time: to .3mcd/m2 |
| 508.0 mcd/m² | 67.0 mcd/m² | 40+ hrs |

* + Legible viewing distance: 50 ft.
	+ Milli-Candela (mcd)
	+ Charging Time: 54 lux (five foot candles) unfiltered fluorescent light for 60 min. (UL 924).
	+ Observational Visibility Test 90 minutes after removal from activating light source.
	1. PHOTO-LUMINESCENT INSERTS
		+ Comprised of a 0.065” PVC Strontium-Aluminate laminated with pressure-sensitive permanent acrylic adhesive to .030” ABS material. Pressure bonded to extruded PVC hook using high bond, pressure sensitive adhesive. Photo-luminescent material is light green in color. Manufactured in the USA. Material in available in the Best performance level.
	2. PHOTO-LUMINESCENT TAPES
		+ .010” Light Green Flexible polyester film laminated with a permanent pressure sensitive adhesive with a poly-coated release liner.
	3. COPY OPTIONS

First Surface Copy

* Direct Print
* 3M High Performance Cast PVC Vinyl

ADA, Tactile Copy

* ADA Direct Print Tactile

**CLEANING GUIDELINES FOR 2/90 SIGNAGE PRODUCTS**

For routine maintenance, use a mild cleanser (such as hand soap or dish detergent) and lukewarm water. Wipe with a sponge or soft cloth. After washing and rinsing, blot dry with a soft cloth or chamois.

Before using any other cleaning solution, always test on an inconspicuous area of the sign. Apply the solution to a cloth rather than spraying directly on the sign. Sanitize all surfaces with the damp cloth and blot dry with a dry cloth or allow to air dry.

Solvent based cleaners can degrade finishes over time. Use the minimum ratio of solvent to water necessary for effective sanitation. Additional caution should be exercised especially on painted surfaces.

For special maintenance, call the Customer Service Department. Do not use alcohol or other cleaning solutions.