FRAME MODULAR SIGN SYSTEM

The 2/90 Frame Modular Sign System is comprised of three primary components: Frame, Structural Backer, and Copy Insert(s).

- Interior sign system is capable of being arranged in a variety of configurations with a minimum of attachments, devices, and connectors.
- Interchangeable engineered design of the system allows for changes of graphic components of the installed sign, without disassembling sign or changing the sign in its entirety.
- Assembled Frame Sign is 9/16" thick with a minimum height of 2", is available in any height and width combination (1" increments recommended), and accepts Copy Inserts on one side in any insert configuration.
- Frame features integrated mounting applications including mechanical fasteners, adhesive tape, magnetic tape, hook and loop, screw, pin, freestanding, various panel hooks and other mounting devices as specified within the Frame assembly.

1. INTERLOCKING FRAME ASSEMBLY

a) Frame assembly features precision miter cut extruded aluminum frame rails, mechanically secured corner brackets, tempered steel spring clips, and FSC-certified hardboard backing, allowing for uniform, modular sizing of Inserts.

b) Frame rails are extruded 6063 T-5 aluminum with a minimum 75% recycled content, anodized satin or painted.

c) Tempered steel spring clips, permanently installed and fixed within channels in the extruded aluminum frame rail, to securely hold Copy Inserts in place.

d) Aluminum frame corner brackets join the miter-cut extruded aluminum frame rails and FSC Certified hardboard backer together into a fully completed assembly.

e) Accent Strips extruded in 6063-T5 aluminum are permanently affixed to the FSC hardboard backing to present a visible horizontal or vertical design element between adjacent Copy Inserts. Accent Strips are anodized satin or painted.

f) Frame features different mounting devices integrated withing the Frame assembly including mechanical fasteners, adhesive tape, magnetic tape, hook and loop, screw, pin,

freestanding, various panel hooks and other mounting devices as specified for wall mounting, workstation mounting, or other.

g) Frame assembly accepts Copy Inserts of various materials up to ¼" thick including ABS plastic, acrylic, PETG, anodized aluminum laminate, high-pressure laminate, or custom materials, in an interchangeable arrangement within sign and with other signs of similar height and width.

2. COPY INSERTS

a) Copy Inserts accept various forms of copy and graphics and front load into the Frame Assembly.

b) Copy Inserts are interchangeable by sliding horizontally and lifting to remove.

c) Wipe clean with a damp cloth. Do not use harsh chemicals or solvents.

d) Copy Insert Materials:

1) ABS Inserts – .090" extruded ABS plastic core with .003" UV resistant acrylic cap bonded during extrusion/texturing process. Insert color is either integral or painted in acrylic lacquer. Finished in a Chromium industries #HM335RA texture pattern to prevent glare and disguise fingerprints. Inserts over 8" wide receive an ACM support backing panel for increased rigidity.

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 – .080" non-glare acrylic face and .080" opaque acrylic backer panel sandwiches die-cut paper or acetate printed media.

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 – .080" non-glare acrylic face and .080" opaque acrylic backer panel sandwiches .020" Lexan media with direct printed or applied vinyl graphics.

7) Jewel Inserts – .060 non-glare acrylic painted subsurface in acrylic lacquer laminated to .030 ABS 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, anodized satin or painted finish which 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. Photo-luminescent material is light green in color. Material is available in Best performance level.

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 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.

11) 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". 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.

12) 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.

13) ADA, Subsurface Tactile Inserts – UV/LED-cured, 1/32" thick, direct-print raised characters reverse printed subsurface to clear, vacuum thermoformable PVC vinyl. Materials are put into a Heat Vacuum Applicator (HVA) to form around the three-dimensional graphics. Direct-print raised, fully domed, clear

Grade 2 Braille dots are printed first surface onto the finish formed PVC vinyl. Insert is back sprayed with acrylic lacquer and laminated to an extruded aluminum carrier Insert.

14) ADA, Exterior Integral Tactile Inserts – Graphics and Insert materials are one piece: .015" aluminum photopolymer, pressure bonded with adhesive to .060 aluminum, 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.

3. ENHANCED BACKERS

a) Enhanced backer plate adds decorative design elements and is applied with adhesive to back of sign.

b) Enhanced Backer Materials:

1) Standard Backer – ¼" Acrylic.

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

3) Solid Color – painted subsurface in acrylic lacquer.

c) Aluminum Backer – .028" anodized aluminum and laminated to .090" extruded ABS plastic.

d) Wood & Stone Backer – .031" vertical grade laminate and laminated to .090" extruded ABS plastic.

4. GRAPHIC PROCESS

a) 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 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 black or white ABS substrate painted first surface with an acrylic lacquer finish.

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" PETG 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 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. Direct-print raised, fully domed, clear Grade 2 Braille dots are printed first surface onto the finish formed PETG. 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 photopolymer, pressure bonded with adhesive to .060 aluminum, 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.

5. TYPOGRAPHY

a) Copy shall be a true, clean accurate reproduction of typeface(s) specified.

b) Letter spacing and in-between line spacing shall be set by manufacturer.

c) Arrows, symbols, and logo art: To be provided in style, sizes, colors and spacing as shown in drawings.

d) Braille: Grade 2

e) Translations: Grade 2 Braille copy, as noted in Sign Message Schedule, is the responsibility of the sign manufacturer. Any second language text, as noted in Sign Message Schedule, is the responsibility of the customer.

6. FABRICATION

a) 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.

b) Form work to required shapes and sizes, with true curves, lines, and angles. Provide necessary rebates, lugs, and brackets for assembly of units.

c) Contact surfaces of connected members must be true. Assembled so joints will be tight and practically unnoticeable, without use of filling compound.

d) 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.

e) Level or straighten wrought work. Members shall have sharp lines and angels and smooth surfaces.

f) Extruded members to be free from extrusion marks. Square turns and corners sharp, curves true.

g) Conceal fastenings where possible. Exposed ends and edges mill smooth, with corners slightly rounded.

h) 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.

i) 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.

j) 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.

7. INSTALLATION

a) 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.

b) 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.

c) 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.

d) Locate signs as shown on the Sign Location Plan.

e) At completion of installation, turn over any additional stock of signs and sign components listed in the Sign Message Schedule.

8. CLEANING AND MAINTENANCE GUIDELINES

a) Cleaning Instructions

1) For routine cleaning, 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.

2) 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.

3) 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.

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

b) Maintenance Reordering Instructions

1) For routine maintenance requiring reordering of new signs, copy inserts, or other components, identify the sign type of the sign or inserts that you need to reorder.

2) Make a physical copy, or isolate the electronic version(s), of the 2/90 Sign Drawing(s) from the 2/90 Signage Program Document set.

3) Record the copy (verbiage) for the new sign or insert desired on the drawing or on a separate sign message schedule.

4) Submit the drawing(s) and sign message schedule to 2/90 Customer Service at info@290signs.com for a quote.

5) 2/90 Customer Service will generate a quotation for the new sign(s), insert(s), or component(s) requested.

6) Upon approval and purchase agreement, the new sign(s), insert(s), or component(s) will be produced and shipped and / or installed by 2/90.