SECTION 10 14 00

INTERIOR SIGNAGE

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

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\*\* NOTE TO SPECIFIER \*\* Nova Polymers, Inc.; photopolymer sign products.  
.  
This section is based on the products of Nova Polymers, Inc., which is located at:8 Evans St., Suite 201Fairfield, NJ 07004Toll Free Tel: 888-484-NOVA (6682)Email: [request info (info@novapolymers.com)](https://arcat.com/rfi?action=email&company=Nova%252BPolymers%252C%252BInc.&message=RE%253A%2520Spec%2520Question%2520(10440npi)%253A%2520&coid=43994&spec=10440npi&rep=&fax=)  
Web: <https://www.novapolymers.com>   
 [ [Click Here](https://arcat.com/company/nova-polymers-inc-43994) ] for additional information.  
Nova Polymers was founded in June 1998. Since that time, Nova Polymers has grown to be the largest manufacturer and distributor of photopolymer sign products in the United States.  
In 1999, Nova began development of the world's first CLEAR photopolymer sign material. The introduction of NovAcryl had a profound effect on the creative potential of an already versatile and unique product, as well as on the sign industry as a whole.  
Today, Nova Polymers continues to work with the Architectural Signage and Design community to expand our high quality and progressive product line in ways that will add creativity and flexibility while maintaining ADA compliance.  
Nova Polymers is committed to providing our industry forward thinking solutions that address the needs of the Architectural community as it relates to material, equipment, and Continuing Education.  
Interior Photopolymers  
ADA Handicap Compliant Product: NovAcryl - ECR.  
Nova has partnered with 3form to develop one of the most creative solutions ever introduced to the Architectural Signage industry.  
This solution bonds Nova's clear photopolymer layer (found in the industry leading NovAcryl) to 3forms Varia Series base material. 3forms patented EcoResin; which has up to 40 percent recycled content, compliments Nova's already diverse line of green solutions.  
Interior Photopolymers  
ADA Handicap Compliant Product: NovAcryl - PT Series.  
Photopolymer layer is a moisture resistant, interior grade nylon material with a Durometer hardness rating of 80 Shore D. The clear NovAcryl PETG base of all NovAcryl sheets contains a co-extruded UV inhibitor to block unwanted light contamination. All NovAcryl sheets come with a high-tack back liner to prevent scratching.  
Interior Photopolymers  
ADA Handicap Compliant Product: NovAcryl - LP.  
We now bond Nova's popular high resolution clear photopolymer to over a hundred standard patterned laminate substrates from trusted names like Formica, Pionite and Wilsonart.   
Interior Photopolymers  
ADA Handicap Compliant Product: NovAcryl - YA-125.  
Novacryl AL Series consists of the same moisture resistant nylon based photopolymer layer as found on NovAcryl. Clear adhesive layer allows for a brushed aluminum face appearance.  
Exterior Photopolymers  
ADA Handicap Compliant Product: NovAcryl NovEx.  
NovEx consists of a waterproof synthetic rubber photopolymer layer that is exterior rated immediately upon initial exposure. Durometer hardness rating of 90 Shore D.  
Substrate: Nova specializes in bonding our clear photopolymer to a variety of base substrates. All of these materials are available with or without the photopolymer layer; NovAcryl PETG; PVC Foam; ABS; Laminates.

1. GENERAL
   1. SECTION INCLUDES

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

* + 1. Plastic interior panel signs.
       1. Room Identification.
       2. Stairs.
       3. Restroom.
       4. Elevator Lobby.
       5. Informational Signage.
       6. Directory Signage.
    2. Plastic exterior panel signs.
       1. Room Identification.
       2. Stairs.
       3. Restroom.
       4. Elevator Lobby.
       5. Informational Signage.
       6. Directory Signage.
  1. RELATED SECTIONS

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

* + 1. Section 06 20 00 - Finish Carpentry.
    2. Section 10 13 13 - Electronic Directories.
    3. Section 10 14 16 - Plaques.
  1. REFERENCES

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

* + 1. ANSI 117.1 - For Buildings and Facilities.
    2. ASTM International (ASTM):
       1. ASTM D149 - Standard Test Method for Dielectric Breakdown Voltage and Dielectric Strength of Solid Electrical Insulating Materials at Commercial Power Frequencies.
       2. ASTM D150 - Standard Test Methods for AC Loss Characteristics and Permittivity (Dielectric Constant) of Solid Electrical Insulation.
       3. ASTM D256 - Standard Test Methods for Determining the Izod Pendulum Impact Resistance of Plastics.
       4. ASTM D542 - Standard Test Method for Index of Refraction of Transparent Organic Plastics.
       5. ASTM D570 - Standard Test Method for Water Absorption of Plastics.
       6. ASTM D635 - Standard Test Method for Rate of Burning and/or Extent and Time of Burning of Plastics in a Horizontal Position.
       7. ASTM D638 - Standard Test Method for Tensile Properties of Plastics.
       8. ASTM D648 - Standard Test Method for Deflection Temperature of Plastics Under Flexural Load in the Edgewise Position.
       9. ASTM D695 - Standard Test Method for Compressive Properties of Rigid Plastics.
       10. ASTM D696 - Standard Test Method for Coefficient of Linear Thermal Expansion of Plastics Between -30 degrees C and 30 degrees C with a Vitreous Silica Dilatometer.
       11. ASTM D732 - Standard Test Method for Shear Strength of Plastics by Punch Tool.
       12. ASTM D785 - Standard Test Method for Rockwell Hardness of Plastics and Electrical Insulating Materials.
       13. ASTM D790 - Standard Test Methods for Flexural Properties of Unreinforced and Reinforced Plastics and Electrical Insulating Materials.
       14. ASTM D792 - Standard Test Methods for Density and Specific Gravity (Relative Density) of Plastics by Displacement.
       15. ASTM D1003 - Standard Test Method for Haze and Luminous Transmittance of Transparent Plastics.
       16. ASTM D1929 - Standard Test Method for Determining Ignition Temperature of Plastics.
       17. ASTM D2843 - Standard Test Method for Density of Smoke from the Burning or Decomposition of Plastics.
       18. ASTM D3418 - Standard Test Method for Transition Temperatures and Enthalpies of Fusion and Crystallization of Polymers by Differential Scanning Calorimetry.
       19. ASTM D3763 - Standard Test Method for High Speed Puncture Properties of Plastics Using Load and Displacement Sensors.
       20. ASTM E84 - Standard Test Method for Surface Burning Characteristics of Building Materials.
       21. ASTM E2072-04 - Standard Specification for Photoluminescent (Phosphorescent) Safety Marketing.
       22. ASTM E2073-02 - Standard Test Method for Photopic Luminance of Photo Luminescent (Phosphorescent) Markings.
    3. Underwriters Laboratories (UL):
       1. UL 94 - Tests for Flammability of Plastic Materials for Parts in Devices and Appliances.
       2. UL 723 - Standard for Test for Surface Burning Characteristics of Building Materials.
  1. SUBMITTALS
     1. Submit under provisions of Section 01 30 00 - Administrative Requirements.
     2. Product Data: Manufacturer's data sheets on each product to be used, including:
        1. Preparation instructions and recommendations.
        2. Storage and handling requirements and recommendations.
        3. Installation methods.
     3. Shop Drawings: Detail drawings showing sizes, lettering and graphics, construction details of each type of sign and mounting details with appropriate fasteners for specific project substrates.
     4. Manufacturer's Installation Instructions: Printed installation instructions for each signage system.
     5. Message List: Signage report indicating signage location, text, and sign type.

\*\* NOTE TO SPECIFIER \*\* Delete selection samples if colors have already been selected.

* + 1. Selection Samples: For each finish product specified, two complete sets of color chips representing manufacturer's full range of available colors and available pictograms, characters, and Braille indications.
    2. Verification Samples: For each finish product specified, two samples, minimum size 6 inches (150 mm) square, representing actual product, color, and typical pictograms, characters, and Braille indications.
  1. QUALITY ASSURANCE
     1. Manufacturer Qualifications: Minimum two years documented experience in work of this Section.
     2. Installer Qualifications: Minimum two years documented experience in work of this Section.

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

* + 1. Mock-Up: Provide a mock-up for evaluation of surface preparation techniques and application workmanship.
       1. Furnish signs designated by Architect.
       2. Do not proceed with remaining work until workmanship, color, and sheen are approved by Architect.
       3. Refinish mock-up area as required to produce acceptable work.
  1. DELIVERY, STORAGE, AND HANDLING
     1. Deliver materials in unopened factory packaging.
     2. Inspect materials at delivery to verify there are no defects or damage.
     3. Store products in manufacturer's original packaging until ready for installation in climate controlled location away from direct sunlight.
     4. Store and dispose of solvent-based materials, and materials used with solvent-based materials in accordance with requirements of local authorities having jurisdiction.
  2. PROJECT CONDITIONS

\*\* NOTE TO SPECIFIER \*\* Delete if not interior signage.

* + 1. Install products in an interior climate controlled environment.
    2. Maintain environmental conditions (temperature, humidity, and ventilation) within limits recommended by manufacturer for optimum results. Do not install products under environmental conditions outside manufacturer's absolute limits.

1. PRODUCTS
   1. MANUFACTURERS
      1. Acceptable Manufacturer: Nova Polymers, Inc., which is located at:8 Evans St., Suite 201Fairfield, NJ 07004Toll Free Tel: 888-484-NOVA (6682)Email: [request info (info@novapolymers.com)](https://arcat.com/rfi?action=email&company=Nova%252BPolymers%252C%252BInc.&message=RE%253A%2520Spec%2520Question%2520(10440npi)%253A%2520&coid=43994&spec=10440npi&rep=&fax=);Web: <https://www.novapolymers.com>

\*\* NOTE TO SPECIFIER \*\* Listing of acceptable fabricators using the Nova Polymers products. Delete fabricators not required.

* + - 1. United States:
         1. Acceptable Fabricator: AdLight Group, 4150 Elati St., Denver, CO 80216. Phone: (303) 399-3334. Email: Sales@AdLightGroup.com. Web: www.adlightgroup.com.
         2. Acceptable Fabricator: AGS, 302 Commerce Drive, Exton, PA 19341. Phone: (610) 363-8150. Email: info@agsinfo.com. Web: www.agsinfo.com.
         3. Acceptable Fabricator: ASI, Iowa - Grinnell, IA, 1219 Zimmerman Dr., Grinnell, IA 50112. Phone: (641) 236-6616. Web: www.asisignage.com/locations/iowa
         4. Acceptable Fabricator: Bell Company, 8327 Parkway Dr., Leeds, AL 35094. Phone: (800) 828-3564. Email: sales@bellcoinc.com. Web: www.braillebybell.com.
         5. Acceptable Fabricator: Boyd Sign Systems, 3901 S Kalamath Street, Englewood, CO 80110. Phone: (800) 333-3190. Email: signs@boydsignsystems.com. Web: www.boydsignsystems.com
         6. Acceptable Fabricator: Cab Signs, 38 Livonia Ave, Brooklyn, NY 11212. Phone: (800) 394-1690. Email: sales@cab-signs.com. Web: www.cab-signs.com.
         7. Acceptable Fabricator: Cadwell Signs, 4 Kuniholm Drive, Holliston, MA 01746. Phone: (508) 429-3100. Web: www.cadwellsigns.com.
         8. Acceptable Fabricator: Graphic Components, 2800 Patterson Street, Greensboro, NC 27407. Phone: (336) 542-2128. Email: sales@graphiccomponents.com. Web: www.graphiccomponents.com.
         9. Acceptable Fabricator: InPro Corporation, S80 W18766 Apollo Drive, Muskego, WI 53150. Phone: (800) 222-5556. Email: rbader@inprocorp.com. Web: www.inprocorp.com.
         10. Acceptable Fabricator: Kroy Sign Systems, 8221 E Gelding Dr., Scottsdale, AZ 85260. Phone: (800) 950-5769. Email: signs@kroysignsystems.com. Web: www.kroysignsystems.com.
         11. Acceptable Fabricator: Neiman & Company, 6842 Valjean Ave., Van Nuys, CA 91406. Phone: (818) 781-8600. Email: signs@neimanandco.com. Web: www.neimanandcompany.com.
         12. Acceptable Fabricator: Park Place Sign Systems, Inc., 2019 30th Street, Hannibal, MO 63401. Phone: (573) 221-1360. Email: sales@parkplacesign.com. Web: www.parkplacesign.com.
         13. Acceptable Fabricator: Sign Pro, 60 Westfield Dr, Plantsville, CT 96479. Phone: (860) 229-1812. Email: pete@signpro-usa.com. Web: www.signpro-usa.com.
         14. Acceptable Fabricator: Signtech, 4444 Federal Blvd., San Diego, CA 92102. Phone: (619) 527-6100 ext.117. Email: sales@Signtech.com. Web: www.signtech.com.
         15. Acceptable Fabricator: Tube Art Group, 11715 SE 5th Street, Bellevue, WA 98005. Phone: (206) 223-1122 Email: mwoods@tubeart.com. Web: www.tubeartgroup.com
         16. Acceptable Fabricator: Welch Signs, 7 Lincoln Ave., Scarborough, ME 04074. Phone: (207) 883-6200. Web: www.welchsign.com
      2. Canada:
         1. Acceptable Fabricator: Marvel Sign and Display, Inc., 99 Rodinea Road, Unit 1, Vaughan, Ontario L6A 1R3, Canada. Phone: (905) 856-6920 Email: alan@marvelsigns.ca. Web: www.marvelsigns.ca.
         2. Acceptable Fabricator: WSI Sign System Ltd. & KING Architectural Products, 31 Simpson Road, Bolton - Ontario L7E 2R6. Phone: (905) 857-2804. Web: www.king-ap.com.
      3. Middle-East:
         1. Acceptable Fabricator: Doganer Signage Systems, Eminel Sanayi Sitesi 1452. Sk. No: 53, OSTIM ANKARA, Turkey. Phone: + 90 312 395 47 10, Email: info@doganermimari.com.tr, Web: www.doganermimari.com.tr
         2. Acceptable Fabricator: Gulfcrafts, New Industrial Area, Zone #81,Street #9, Building #40, Doha - Qatar. Phone: 974 44602002 or 974 30244303. Email: elma@gulfcrafts.net. Web: www.gulfcrafts.net.

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

* + 1. Substitutions: Not permitted.
    2. Requests for substitutions will be considered in accordance with provisions of Section 01 60 00 - Product Requirements.
  1. PERFORMANCE REQUIREMENTS
     1. Provide photopolymer signage that conforms to the requirements of all regulatory agencies holding jurisdiction.

\*\* NOTE TO SPECIFIER \*\* Delete if glow in the dark signage is not required.

* + 1. Provide glow in the dark, photo luminescent material that complies with applicable provisions of ASTM E 2073-02 and DIN 67510. Photo luminescent material must have up to eight hours of luminance.

\*\* NOTE TO SPECIFIER \*\* Delete if ADA conformance is not required.

* + 1. Requirements:
       1. Comply with all applicable provisions of the 2010 ADA Standard for Accessible Design.
       2. Character Proportion: Letters and numbers on signs must have a width-to-height ratio between 3:5 and 1:1 and a stroke width-to-height ratio between 1:5 and 1:10.
       3. Color Contrast: Characters and symbols must contrast with their background - either light characters on a dark background or dark characters on a light background.
       4. Raised Characters or Symbols: Letters and numbers on signs must be raised 1/32 in (0.8 mm) minimum and be sans serif characters. Raised characters or symbols must be at least 5/8 in (16 mm) high but no higher than 2 in (50 mm). Symbols or pictograms on signs must be raised 1/32 in (0.8 mm) minimum.
       5. Symbols of Accessibility: Accessible facilities required to be identified must use the international symbol of accessibility.
       6. Braille: Grade II with accompanying text.

\*\* NOTE TO SPECIFIER \*\* Delete if fire performance characteristics is not required.

* + 1. Fire Performance Characteristics:
       1. Provide photopolymer signage with surface burning characteristics that consist of a flame spread of 75 and a smoke development of 120 when tested in accordance with UL 723 (ASTM E 84).
       2. Self-Extinguishing: Provide photopolymer signage with a CC1 classification for .060 in thick material when tested in accordance with the procedures in ASTM D 635, Standard Test Method for Rate of Burning and/or Extent and Time of Burning Plastics in a Horizontal Position.
       3. Vertical Burn: Provide photopolymer material that is classified as 94V-2 for material .118 in thick or greater and 94HB for material .118 in thick or less when tested in accordance with UL 94, Tests for Flammability of Plastic Materials for Parts in Devices and Appliances.
       4. Self-Ignition Temperature: Provide photopolymer material that has a self-ignition temperature of 800 degrees F (427 degrees C) when tested in accordance with ASTM D 1929.
    2. Novacryl PETG: Polyethylene terephthalate glycol. A thermoplastic polyester with high chemical resistance, and fomability.
       1. ADA Compliant.
       2. NSF: Listed.
       3. FDA: Conforms to food contact regulations.
       4. Physical Properties:
          1. Specific Gravity per ASTM D792: 1.27.
          2. Optical Refractive Index per ASTM D542: 1.57.
          3. Light Trans - Total per ASTM D1003: 86 percent.
          4. Light Trans - Haze per ASTM D1003: 1 percent.
          5. Water Absorption by weight per ASTM D570: 0.2 percent.
       5. Mechanical Properties:
          1. Tensile Strength per ASTM D638: 7,700 psi.
          2. Tensile Modulus of Elasticity per ASTM D790: 320,300 psi.
          3. Flexural Strength per ASTM D790: 11,200 psi.
          4. Flexural Modulus of Elasticity per ASTM D790: 10,000 psi.
          5. Izod Impact Strength Molded - Milled Notch per ASTM D256: 1.7 Ft-lb per inch Notch.
          6. Rockwell Hardness per ASTM D785: R-115.
          7. Drop Dart Impact per ASTM D3763: 22 ft-lbs.
          8. Shear Strength per ASTM D732: 9,000 psi.
          9. Compressive Strength per ASTM D695: 8,000 psi.
       6. Thermal Properties:
          1. Deflection Temperature at 264 psi ASTM D648: 157 degrees F.
          2. Deflection Temperature at 66 psi ASTM D648: 164 degrees F.
          3. Coefficient of Thermal Expansion ASTM D696: 3.8x10 Inches per inch per degrees F.
          4. Flammability (Burning Rate) ASTM D635: 0.06 Inches per minute.
          5. Flammability UL 94: HB.
          6. Smoke Density Rating ASTM D2843: 53.8 percent.
          7. Self-Ignition Temp ASTM D1929: 880 degrees F.
          8. Flame Spread Index ASTM E84: 85.
          9. Smoke Development Index ASTM D84: 450.
          10. Glass Transition Temperature ASTM D3418: 178 degrees F.
       7. Electrical Properties:
          1. Dielectric Constant at 1KHz ASTM D150: 2.6.
          2. Dielectric Constant at 1MHz ASTM D150: 2.4.
          3. Dielectric Strength ASTM D149: 410 Volts per mil.
  1. SIGNAGE - GENERAL
     1. It is the intent of these specifications to establish a sign standard for the Owner including but not limited to, wall-mounted directional signs, primary room identification, restrooms, conference rooms and all code compliant Braille signage.
     2. Comply with all applicable provisions of the 2010 ADA Standard for Accessible Design codes that apply to the State and Local jurisdiction of the project.
     3. If required text and graphics are not indicated in specification or on drawings, obtain Owner's instructions as to text and graphics prior to preparation of shop drawings.
     4. Typography: See Drawings. Copy shall be a clean and accurate reproduction of typeface(s) specified. Upper and lower case and all caps as indicated in Sign Type drawings and Signage Schedule. Letter spacing to be set by manufacturer.
     5. Arrows, symbols, and pictograms will be provided in style, sizes, colors and spacing as indicated in drawings for each sign system.

\*\* NOTE TO SPECIFIER \*\* Remove all but one of the following. Grade 2 Braille is the standard in the US except for California. California Braille is Grade 2 Braille with different Braille cell spacing to meet California's codes under Title 24. Grade 1 Braille is used in Canada, the Middle East and throughout the world.

* + 1. Braille:
       1. Grade 1 Braille.
       2. Grade 2 Braille.
       3. California Braille.
    2. Design:

\*\* NOTE TO SPECIFIER \*\* Remove all but one of the following four placements. If more than one is required, indicate clearly where each will be applied.

* + - 1. Text/Graphics Placement: Right justified.
      2. Text/Graphics Placement: Centered.
      3. Text/Graphics Placement: Left justified.
      4. Text/Graphics Placement: As indicated on contract drawings.

\*\* NOTE TO SPECIFIER \*\* Remove all but one of the following 11 font options. If more than one is required, indicate clearly where each will be applied. Refer to the 2010 Standard of Accessible design for font thickness, stroke ratio and character spacing which is a minimum of 1/8".

* + - 1. Font: As indicated on the Contract Drawings.
      2. Font: Arial.
      3. Font: Avenir.
      4. Font: Charlotte Sans Book.
      5. Font: Futura.
      6. Font: Gill Sans.
      7. Font: Helvetica Regular.
      8. Font: Helvetica Bold.
      9. Font: Optima.
      10. Font: Stone Sans Serif.
      11. Font: Univers Condensed.
      12. Font: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

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

* 1. INTERIOR SIGNAGE

\*\* NOTE TO SPECIFIER \*\* Remove products from the list below that are not required. All Novacryl Photopolymer substrate in this section are rated for interior use only. Novacryl PT Series Photopolymer is backed by NOVACRYL PETG thermoplastic incorporate a minimum of 40 percent post-industrial recycled content. Novacryl ECR is photopolymer integrally extruded to 3-form Varia™, which has a minimum of 40 percent post-industrial waste content and is GreenGuard® certified. Novacryl Permaglow 150 has luminescent powder colorants and is the ideal solution for safety and egress signage concerns. All materials must have a topcoat of acrylic polyurethane to ensure protection from cleaning agents, UV, and moisture. Novacryl is fire rated for use in applications where fire hazard classification is required.

* + 1. Panel Material: Novacryl PT Series Photopolymer

\*\* NOTE TO SPECIFIER \*\* Novacryl PT is backed by a clear NOVACRYL PETG sheet. Delete if not required. Suitable for interior use only.

* + - 1. Composition: 0.032 inch (0.8 mm) thick moisture resistant, non-glare interior nylon photopolymer on ultraviolet resistant clear NOVACRYL PETG sign base, single piece construction. Laminated photopolymers, added-on characters, and engraved characters are not acceptable.
      2. Sustainable Certification: Minimum 40 percent pre-consumer recycled content.

\*\* NOTE TO SPECIFIER \*\* Delete base thickness not required.

* + - 1. Base thickness: 0.020 inch (0.5 mm) Gloss NOVACRYL PETG.
      2. Base thickness: 0.040 inch (1.0 mm) Non-glare NOVACRYL PETG.
      3. Base thickness: 0.060 inch (1.5 mm) Non-glare NOVACRYL PETG.
      4. Base thickness: 0.080 inch (2.0 mm) Non-glare NOVACRYL PETG.
      5. Base thickness: 0.118 inch (3.0 mm) Non-glare NOVACRYL PETG.
      6. Base thickness: 0.190 inch (4.8 mm) Non-glare NOVACRYL PETG.
      7. Base thickness: 0.236 inch (6.0 mm) Non-glare NOVACRYL PETG.
      8. Base thickness: 0.375 inch (9.5 mm) Gloss NOVACRYL PETG.

\*\* NOTE TO SPECIFIER \*\* Insert color. Delete color provision not required.

* + - 1. Type and Color: To be selected from manufacturer's full color range by Architect.
      2. Size: \_\_\_\_
      3. Surface burning characteristics: Flame spread/smoke developed rating less than 75/120, tested to ASTM E 84 and UL 723.
      4. Rate of burning: Tested to ASTM D 635 at nominal 0.060 inch (1.5 mm) thickness with resulting Classification CC1.
      5. Vertical burning: Tested to UL 94, classified as 94V-2 in thickness of 0.118 inch (3.0 mm) or greater and 94HB in thicknesses less than 0.118 inch (3.0 mm).
      6. Self-ignition temperature: 800 degrees F (427 degrees C), tested to ASTM D 1929.

\*\* NOTE TO SPECIFIER \*\* Novacryl YA is backed by aluminum sheet. Delete if not required. Suitable for interior use only.

* + 1. Panel Material: Novacryl AL Series Photopolymer.
       1. Composition: 0.032 inch (0.8 mm) thick moisture resistant interior nylon photopolymer bonded to 0.017 inch (0.4 mm) thick brushed aluminum alloy base.
       2. Base thickness: 0.017 inch (0.4 mm) thick brushed aluminum alloy base.

\*\* NOTE TO SPECIFIER \*\* Insert color. Delete color provision not required.

* + - 1. Type and Color: To be selected from manufacturer's full color range by Architect.
      2. Size: \_\_\_\_.

\*\* NOTE TO SPECIFIER \*\* Novacryl Permaglow 50 is backed by a photoluminescent sheet. Novacryl Permaglow 250 ensures orderly egress to and inside stairwells and exits, clearly identifies fire extinguishers and emergency aids, and illuminates fire escape and evacuation routes Delete if not required. Suitable for interior use only.

* + 1. Panel Material: Novacryl Permaglow 250.
       1. Composition: 0.032 inch (0.8 mm) thick moisture resistant interior nylon photopolymer bonded to 0.047 inch 250/22 photoluminescent rigid PVC.
       2. Base thickness: 0.047 inch thick photo luminescent rigid PVC.

\*\* NOTE TO SPECIFIER \*\* Insert color. Delete color provision not required.

* + - 1. Type and Color: To be selected from manufacturer's full color range by Architect.
      2. Size: \_\_\_\_.

\*\* NOTE TO SPECIFIER \*\* Novacryl ECR is a clear photopolymer layer, extruded into 3forms Varia ecoresin. Varia ecoresin panels contain a minimum of 40 percent recycled content and are SCS certified. Varia ecoresin panels are Greenguard certified indoor air quality. Delete if not required. Suitable for interior use only.

* + 1. Panel Material: Novacryl ECR Series Photopolymer.
       1. Composition: 0.032 inch (0.8 mm) thick moisture resistant, non-glare interior nylon photopolymer on 3form Varia Ecoresin NOVACRYL PETG sign base, single piece construction. Laminated photopolymers, added-on characters, and engraved characters are not acceptable.

\*\* NOTE TO SPECIFIER \*\* All 3form Varia Ecoresin Products comply with SCS certification below, except River Rock Organics, 0.126 gage wire mesh insert, and 0.0625 gage color film inserts. Delete if not required.

* + - 1. Base thickness: Determined by the 3form Varia Ecoresin pattern. Gauge not to exceed 0.0375 inch (9.5 mm)

\*\* NOTE TO SPECIFIER \*\* Insert type and color. Delete color provision not required.

* + - 1. Type and Color: To be selected from the 3form Varia ecoresin line of substrates by Architect. At least one side of the Varia substrate chosen must be Sandstone or Patina.
      2. Type and Color: To be selected from manufacturer's full color range by Architect.
      3. Size: \_\_\_\_.

\*\* NOTE TO SPECIFIER \*\* Novacryl LP Series is a clear photopolymer layer, extruded to a patterned laminate base. Delete if not required. Suitable for interior use only.

* + 1. Panel Material: Novacryl LP Series Photopolymer
       1. Composition: 0.032 inch (0.8 mm) thick moisture resistant, non-glare interior nylon photopolymer on a Formica, Pionite or Wilsonart laminate sign base, single piece construction. Laminated photopolymers, added-on characters, and engraved characters are not acceptable.

\*\* NOTE TO SPECIFIER \*\* Insert type and color. Delete color provision not required.

* + - 1. Type and Color: To be selected from Wilsonart, Pionite or Formica laminates by Architect. The pattern can be a solid color, wood grain or other textures. The finish must be Wilsonart (60-Matte, 38-Fine Velvet), Formica (58-Matte), and Pionite (SD, VE).
      2. Size: \_\_\_\_.

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

* 1. EXTERIOR SIGNAGE

\*\* NOTE TO SPECIFIER \*\* Novacryl EX Photopolymer substrates are rated for exterior use. An aluminum base backs Novacryl EX Series Photopolymer. Novacryl EX Photopolymer resin has a blend of synthetic rubber monomers with a 0 percent swell rate. All Novacryl EX materials must have a topcoat of acrylic polyurethane to ensure protection from cleaning agents, UV, and moisture. Novacryl is fire rated for use in applications where fire hazard classification is required.

* + 1. Panel Material: Novacryl EX Series Photopolymer.
       1. Composition: 0.032 inch (0.8 mm) thick exterior-grade photopolymer resin bonded to 0.016 inch (0.4 mm) thick aluminum alloy base.
       2. Base thickness: 0.016 inch (0.4 mm) thick brushed aluminum alloy base.

\*\* NOTE TO SPECIFIER \*\* Insert color. Delete color provision not required.

* + - 1. Type and Color: To be selected from manufacturer's full color range by Architect.
      2. Size: \_\_\_\_.
  1. ACCESSORIES

\*\* NOTE TO SPECIFIER \*\* Include one of the following three paragraphs based on desired mounting method.

* + 1. Adhesive:
       1. Type recommended by sign manufacturer.
       2. Maximum volatile organic compound (VOC) content: 70 grams per liter.
    2. Tape: Double sided, waterproof, pressure sensitive.

\*\* NOTE TO SPECIFIER \*\* Delete screw type not required.

* + 1. Fasteners: Chrome plated screws.
    2. Fasteners: Brass screws.
    3. Fasteners: Stainless steel screws.
  1. FABRICATION
     1. Fabricate panel material in accordance with manufacturer's instructions and approved shop drawings.
     2. Fabricate signs by photo polymer process using film negatives to produce characters and graphics in contrasting color, raised. Refer to Signage Schedule.
     3. Characters:
        1. Height: Refer to Signage Schedule.
        2. Style: Refer to Signage Schedule.
        3. Width to height ratio: Refer to Signage Schedule.
        4. Stroke width to height ratio: Refer to Signage Schedule.
     4. Pictograms: Refer to Signage Schedule.
     5. Provide Braille Grade indications for each character.

\*\* NOTE TO SPECIFIER \*\* Include the following for framed signs. Delete if not required.

* + 1. Frames:
       1. Miter corners; fit to hairline joint.
       2. Secure frame to sign with adhesive.

\*\* NOTE TO SPECIFIER \*\* Include the following if changeable message strips are required. Delete if not required.

* + 1. Changeable Slide Inserts: Clear NOVACRYL PETG sheet cover with slot behind for insertion of changeable slide strip, removed from side.

1. EXECUTION
   1. EXAMINATION
      1. Do not begin installation until substrates have been properly prepared.
      2. If substrate preparation is the responsibility of another installer, notify Architect of unsatisfactory preparation before proceeding.
   2. PREPARATION
      1. Clean surfaces thoroughly prior to installation.
      2. Prepare surfaces using the methods recommended by the manufacturer for achieving the best result for the substrate under the project conditions.
   3. INSTALLATION
      1. Install in accordance with manufacturer's instructions.
   4. PROTECTION
      1. Protect installed products until completion of project.
      2. Touch-up, repair or replace damaged products before Substantial Completion.

END OF SECTION