



**PHOTOPOLYMER**  
MANUFACTURING PROCESS  
& PRODUCT PORTFOLIO

# Novacryl® Designer Series Photopolymer

Novacryl® Photopolymer is the world's leading substrate for ADA Braille and Accessible Room Identification Signage. Novacryl® has the most diverse range of substrates available and allows for unlimited design while being environmentally responsible. Don't sacrifice your design to comply. Novacryl® allows your creativity to flow free and make your ideas possible.



**EC** Series

Novacryl® ECR™ addresses the need for more creative sign solutions by the architectural design and sign fabrication industry. We've partnered with 3form to develop this imaginative product line whose materials broadly expand the selection of colors, patterns, textures and finishes available for ADA-compliant sign fabrication. Clear photopolymer bonded to 3form's Varia™ can create signs as diverse as your imagination.



**PT** Series

Novacryl® PT™ series is the most versatile photopolymer material ever created for signage. This clear interior-grade PETG contains 20% post-industrial content, limiting the amount of landfill contributions, and is resilient/shatterproof. Your fabricating options with various thicknesses can be surface and/or subsurface painted or use printing of digital graphics.



**LP** Series

Novacryl® LP™ is all about choice for the architectural design and sign fabrication industry. Extruding clear photopolymer to the comprehensive offering of laminates made by leaders in the industry including Wilsonart, Formica, and Pionite, sign designers can choose from an array of wood grains, marbles and granites, plus hundreds of colors and patterns to complement any decor.



**EX** Series

Novacryl® EX™ is the industry's first pure, exterior-grade photopolymer. This exterior grade material takes the guessing out when specifying a material for high moisture/high humidity environments. Novacryl® EX™ is compatible with all exterior paints and requires no extended treatment.



**PG** Series

Novacryl® Permaglow 250™ is the ideal solution for safety and egress signage, as well as environmental concerns about energy savings and CO2 emissions. UL1994-listed photoluminescent photopolymer material absorbs ambient light during the day and provides photoluminescent emergency guidance at night. In the event of a power outage, the photoluminescent material instantly emits light without electrical power ensuring orderly egress to and inside stairwells and exits.



**AL** Series

Novacryl® AL™ series consists of the same interior grade material as our PT™ Series. This brushed aluminum-based photopolymer material can be installed in unregulated interior environments.

# Photopolymer Product Information

| Item #   | Description               | Sheet Size  | Case Lot   |                     |
|--|---------------------------|---|--|---------------------|
| PT   | PT-020M                   | .020" gloss sign base / .032" photopolymer layer  | 19" x 25" 10 Sheets                                  |                     |
|  | PT-040M                   | .040" non-glare sign base / .032" photopolymer layer  | 19" x 25" 10 Sheets                                  |                     |
|  | PT-060M (1/16")           | .060" non-glare sign base / .032" photopolymer layer  | 19" x 25" 10 Sheets                                  |                     |
|  | PT-080M                   | .080" non-glare sign base / .032" photopolymer layer  | 19" x 25" 10 Sheets                                  |                     |
|  | PT-118M (1/8")            | .118" non-glare sign base / .032" photopolymer layer<br>(30" x 40" sheets available - 5 per case) | 19" x 25" 5 Sheets                                   |                     |
|  | PT-190M (3/16")           | .190" non-glare sign base / .032" photopolymer layer  | 19" x 25" 5 Sheets                                   |                     |
|  | PT-236M (1/4")            | .236" non-glare sign base / .032" photopolymer layer<br>(30" x 40" sheets available - 5 per case) | 19" x 25" 5 Sheets                                   |                     |
|  | PT-375M                   | .375" gloss sign base / .032" photopolymer layer  | 19" x 25" 5 Sheets                                   |                     |
|  | BLACK                     | PT-060BLKM  | .060" <b>BLACK</b> Series / .032" photopolymer layer | 19" x 25" 10 Sheets |
|  |                           | PT-118BLKM  | .118" <b>BLACK</b> Series / .032" photopolymer layer | 19" x 25" 5 Sheets  |
| EC   | ECRFOSSILLEAF118M         | Varia Fossil Leaf Large / .118" Gauge   | 19" x 24" 5 Sheets                                   |                     |
|  | ECRGINGKOTHATCH250M       | Varia Ginko Thatch / .250" Gauge  | 19" x 24" 5 Sheets                                   |                     |
|  | ECRIONGREENTEA2060M       | Varia Ion Green Tea 2 / .060" Gauge   | 19" x 24" 5 Sheets                                   |                     |
|  | ECRMARISEAMLESS060M       | Varia Mari Seamless - .060" Gauge   | 19" x 24" 5 Sheets                                   |                     |
|  | ECRBANANAFIBERLT118M      | Varia Banana Fiber Light / .118" Gauge  | 19" x 24" 5 Sheets                                   |                     |
|  | ECRBGRASSLITE118M         | Varia Beargrass Light / .118" Gauge   | 19" x 24" 5 Sheets                                   |                     |
|  | ECRMEGACIRQUESIL118M      | Varia Mega Cirque Silver / .118 Gauge   | 19" x 24" 5 Sheets                                   |                     |
|  | ECREIDERDOWN250M          | Varia Eiderdown / .250 Gauge  | 19" x 24" 5 Sheets                                   |                     |
|  | ECRSOLORED118M            | Varia Pure Red / .118" Gauge  | 19" x 24" 5 Sheets                                   |                     |
|  | ECRSOLOBLACK118M          | Varia Black / .118: Gauge   | 19" x 24" 5 Sheets                                   |                     |
|  | ECRTIGERTHATCH375M        | Varia Tiger Thatch / .375" Gauge  | 19" x 24" 5 Sheets                                   |                     |
|  | ECRLINEAIVORY118M         | Varia Linea Ivory / .118" Gauge   | 19" x 24" 5 Sheets                                   |                     |
|  | ECRWALNUT118M             | Varia Walnut / .118" Gauge  | 19" x 24" 5 Sheets                                   |                     |
|  | ECRHARVEST118M            | Varia Harvest / .118" Gauge   | 19" x 24" 5 Sheets                                   |                     |
|  | ECRVIAAQUA250M            | Varia Via Aqua / .250: Gauge  | 19" x 24" 5 Sheets                                   |                     |
| ECRHARVEST250M   | Varia Harvest .250" Gauge | 19" x 24" 5 Sheets  |  |                     |
| <i>(100+ 3form patterns also available)</i>  |                           |   |  |                     |
| LP   | LPAMBERMAPLE1924M         | Formica Amber Maple / .032" Photopolymer  | 19" x 24" 5 Sheets                                   |                     |
|  | LPATLANTISBLUE1924M       | Wilsonart Atlantis Blue / .032" Photopolymer  | 19" x 24" 5 Sheets                                   |                     |
|  | LPSUNSETSUUDE1924M        | Wilsonart Sunset Suede / .032" Photopolymer   | 19" x 24" 5 Sheets                                   |                     |
|  | LPSTELLAR1924M            | Formica Stellar / .032" Photopolymer  | 19" x 24" 5 Sheets                                   |                     |
| <i>(+100s of standard patterned laminate substrates from trusted names like Formica, Pionite and Wilsonart also available)</i> |                           |   |  |                     |
| EX   | NOVACRYL-EX2030           | Exterior Aluminum Novacryl  | 20" x 30" 10 Sheets                                  |                     |
|  | NOVACRYL-EX2226           | .009 STEEL / .032" Exterior Photopolymer  | 22" x 26" 10 Sheets                                  |                     |
|  | XP Cleaner                | For processing up to 50 sheets of NovEx   | 32 oz. Bottle  |                     |
| AL   | 125-ALUM                  | .017 Aluminum / .032" Interior Photopolymer   | 19" x 25" 10 Sheets                                  |                     |
| PG   | PERMAGLOW250              | .047" photo-luminescent PVC / .032" Interior Photopolymer   | 19" x 23.5" 10 Sheets                                |                     |

# Photopolymer Room Layout



## A INKSTAR FILM SYSTEM WITH EPSON PRINTER

*Making Film Negatives With The Correct Density*

Designed specifically to meet the unique needs of sign and screen printers.

## B ORBITAL X PHOTOPOLYMER PROCESSOR

*Making Signs*

All-in-one system that processes water-washable photopolymer sign material.

## C SHEAR

*Cutting to Size*

## D NP HS-1276 HOT STAMP DEVICE

*Adding Color to Raised Characters*

Create stunning graphics: instantly apply color and metallic effects to painted or unpainted raised ADA-compliant photopolymer graphics.

## E SINK

Sink is required for rinsing processed photopolymer sheets, cleaning brushes, etc. Hot/Cold water inlet and outlet required.

# Photopolymer Manufacturing Products

## PHOTOPOLYMER EQUIPMENT

| Item #         | Product  | Description  |
|----------------|--|--|
| WFM            | Workflow Manager                                 | Workflow Manager Software<br>Workflow Manager ADA<br>Package, File Creation  |
| INKSTAR SYSTEM | InkStar System<br>- RIP and new<br>Epson Printer | Epson Stylus Pro T3270<br>Epson Stylus Pro Printer<br>Configured with AccuRIP<br>Unit Size 54"x27"x48"             |
| ORBITAL X      | Orbital X  | 24" x 30" all-in-one processing system<br>for ADA signage. 220V Single Phase Current<br>Unit Size 40"L x 42"Wx48"H |
| SHEAR 25"      | Shear  | Finishing Shear<br>Precision Shear with Guillotine Design<br>Unit Size 26"L x 32"W x 12.5"H                        |
| HS-1276        | Hot Stamp Machine                                | Nova Polymers HS Series Hot Stamp<br>Unit Size 26"L x 23"W x 36"H<br>Applying Color to Raised Graphics             |



## INKS



|              |                         |                     |
|--------------|-------------------------|---------------------|
| DYESTAR 7900 | Photo & Matte Black Ink | 350ML per Cartridge |
| DYESTAR 7900 | Clear Inks              | 350ML per Cartridge |
| T-3270       | Clear Set 4 Inks        | 700ML per Set       |
| T-3270       | Photo Black Ink         | 700ML per Cartridge |

## FILM



|               |                       |                |
|---------------|-----------------------|----------------|
| INKSTAR424100 | Inkstar Film 24"X100' | Price per Roll |
|---------------|-----------------------|----------------|

## MAINTENANCE TANKS



|           |              |                  |
|-----------|--------------|------------------|
| 12C890191 | Epson 7900   | Maintenance Tank |
| T619300   | Epson T-3270 | Maintenance Tank |

## TAPES



### Adhesive Tape Systems for Sign & Display Markets:

Application Tapes | Transfer Tapes | Industrial Tapes |  
Foam Tapes | Carpet & Clothes Tapes | UHB Tapes



# How to Make Photopolymer Signs

## 5 STEP process of making photopolymer signage

### STEP 1

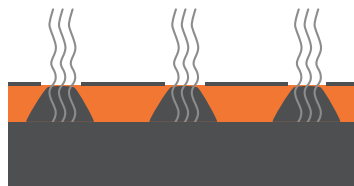
Contact With Film Negative



The first step is to place a high density film negative on top of the photopolymer sheet.

### STEP 2

Exposure with UV Light



There is a bank of UV lamps that shine down and pass through the clear areas of the film negative and expose the photopolymer material.

### STEP 3

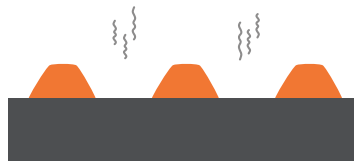
Wash in Plain Tap Water



The unexposed photopolymer gets washed away during the washout process in plain tap water.

### STEP 4

Drying



Dry the moisture off the material. The photopolymer and the base PETG does not absorb moisture during the washout - drying is to evaporate any standing moisture left on the sheet.

### STEP 5

Post Exposure



Post exposure is a second exposure to fully cure, harden and activate the photopolymer. This is the final step in processing photopolymer.

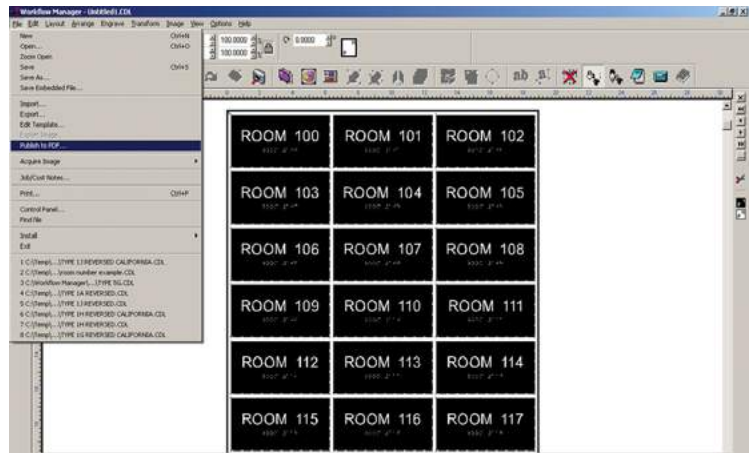
# Software, Equipment and On-Site Training

Congratulations on making the decision to fabricate ADA/Accessible compliant signage using Novacryl® photopolymer in your facility. Welcome to the Nova family.

## SOFTWARE INSTALLATION:

Completed prior to our arrival to ensure the training time on-site is maximized.

- Install Workflow Manager (PC-Based application).
- Nova Polymers holds a training webinar with your operator(s) and our programming team. During the training session, we will walk through the functionality of the software and create films and negatives that will be used for future installation training.
- Install our RIP program for the InkStar film negatives solution to ensure all settings are correct and the produced film is top quality.



## EQUIPMENT INSTALLATION:

- Ensure the electrical and water connections are made to the equipment received.
- Items arrive within 3 days, shipping from our Ohio warehouse.

## ON-SITE INSTALLATION AND TRAINING:

- Review workflow manager software and assist with film negatives.
- Review all steps with Orbital Processor and make your first ADA-compliant sign from Novacryl® photopolymer.
- Paint and Hot Stamp signs. Review process to ensure adequate coating.





**Nova Polymers** is the global leader in the development of materials and processing equipment for the fabrication of Accessible and ADA compliant signage. With a focus on education and the continued development of innovative materials that meet international accessibility guidelines, Nova Polymers continues to lead the sign industry and help people with visual disabilities navigate the built environment.

ADA Compliant. **PERIOD**®

