



Building & Construction

Arclin[®]
Performance Applied

Industrial & Decorative Surface Overlays

ENGINEERED PERFORMANCE



$$m_1 v_1 + m_2 v_2 = m_3 v_3$$
$$p_1 + p_2 = p_3$$



ARCLIN IS ENGINEERING PERFORMANCE —
AND OPPORTUNITY —
FOR WOOD-BASED PANELS.

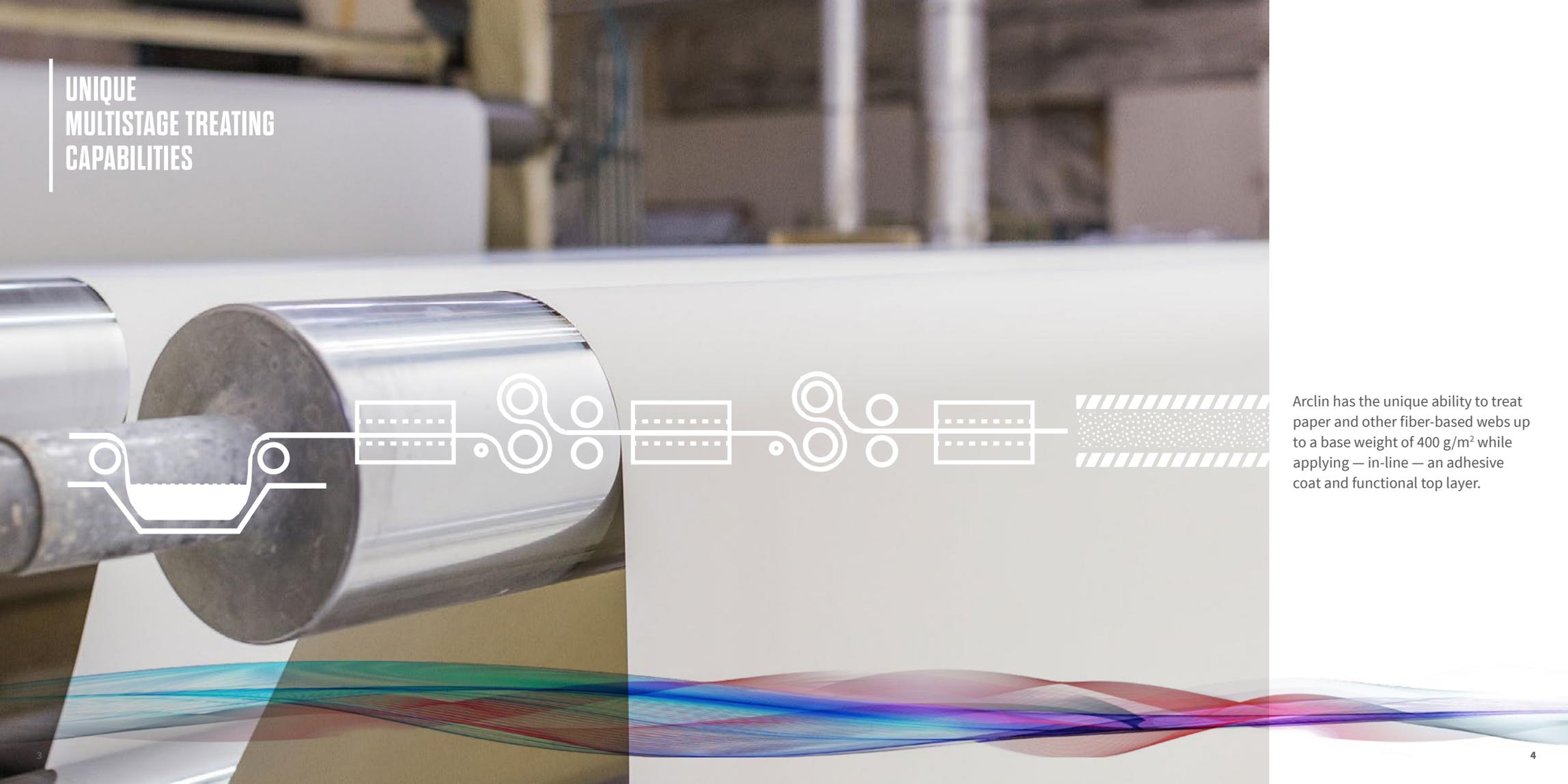
Arclin has long been the North American leader in engineering industrial and decorative surface overlays that enhance the performance of wood-based panels. Today, we're bringing that technology to markets around the world.

Surface-enhancing overlays for wood panels — including solid wood, plywood, OSB and LVL — have a long tradition in North America.

As building rates increased in the early 20th century, so too did the quest to improve panel performance. Industrial surface overlays were introduced to broaden application options, create uniform surfaces, extend panel life and resist environmental elements. Most recently, surface overlays have helped meet standards for clean air and environmental sustainability.

Today, Arclin is leveraging decades of experience in resin and treating technologies for paper and glass-based materials for wood panels. A world leader in panel surfacing, we're meeting today's market demands and through continuous innovation, creating new opportunities for our customers around the globe.

UNIQUE
MULTISTAGE TREATING
CAPABILITIES



Arclin has the unique ability to treat paper and other fiber-based webs up to a base weight of 400 g/m² while applying — in-line — an adhesive coat and functional top layer.

**INDUSTRIAL
SURFACE
APPLICATIONS**

Concrete Forming



Paint Based



Protective



Decorative



MDO HDO

Arclin's industrial surfaces are primarily medium and high density overlays.



EPIC® ENHANCED PERFORMANCE OVERLAYS FOR CONCRETE FORMING

Arclin's EPIC® suite of concrete-forming overlays have set the standard for extending panel life and producing high quality finishes. EPIC overlays enable multiple pours with even harsh, high-alkaline concrete mixes, saving money and supporting the sustainable use of resources.

MDO

Medium Density Overlays (MDO)

For multiple casting — masking irregularities of face veneer

EF

Enhanced Flow MDO

Smooth matte concrete finish

MCFO

CCFO

Coated Overlays – Melamine & Phenol (MCFO & CCFO)

For high-alkaline concrete and smooth finish

HDO

High Density Overlays (HDO)

For up to 25 pours

High quality semi-gloss architectural concrete

MEDIUM DENSITY OVERLAY (MDO)

epic

MDO

- 35-38% core resin content (C-staged)
- 200g/m² base unbleached Kraft paper
- 62g/m² glue line (B-staged)
- Ideal for coniferous and poplar plywood
- For primary application in the press or secondary lamination on sanded plywood
- Multiple finish options
- 8-15 pours per panel
- Chemical-resistant

epic

MCFO

CCFO

MELAMINE COATED MDO (MCFO) PHENOL COATED MDO (CCFO)

Provides the flexibility of an MDO with the performance of an HDO

- 35-38% core resin content (C-staged)
- 200 g/m² base unbleached Kraft
- 62 g/m² glue line (B-staged)
- 66 g/m² / 58g/m² top coat (B-staged)
- For aggressive, high alkaline concrete mix designs
- Combines the quality of HDO with the ease of handling only one sheet — developed especially for overseas markets

HIGH DENSITY OVERLAYS (HDO)

For up to 25 pours

Produces high quality semi-gloss architectural concrete

- 58% core resin content (B-staged)
- 80 g/m² base unbleached Kraft
- To be applied with an MDO cushion sheet
- For aggressive, high-alkaline concrete mix designs
- Can provide semi- and high-gloss finish when used with appropriate substrate and pressing surface

epic

HDO

The *Ingredients* of **Green**.®

Arclin applies its proprietary E-Gen® designation to its products that are expressly engineered to meet or exceed existing product performance standards and to reduce manufacturing and downstream environmental impact.



EVERY FINISH, EVERY APPLICATION... EVER **GREEN**.

Arclin EPIC® overlays for concrete forming have earned Arclin's exclusive E-Gen® designation for:

- Extending panel life over non-overlaid BB plyform panels — up to 10 times for MDO, 10-20 times for HDO
- Availability with FSC® chain-of-custody certification
- Potential contributions to LEED credits as part of a waste reduction strategy
- Cutting materials costs by up to 64% and reducing jobsite waste



ReadyPaint ReadyPrime

Arclin's ReadyPaint and ReadyPrime MDOs provide smooth, opaque surfaces ideal for finish painting. Unprimed ReadyPaint may be primed with acrylic latex or alkyd oil formulations. ReadyPrime features a thermoset acrylic latex primer topcoat compatible with most acrylic, alkyd and oil-based paints.

These MDOs are suitable for use on soffits and siding, fascia and accent panels, and as substrates for painted signs, liners, truck and trailer doors, industrial coatings and store displays.

ReadyPaint/ReadyPrime MDO

- 28% core resin content (C-staged)
- 200 g/m² base unbleached Kraft
- Special resin formulation for primer application
- With or without glue line
- For interior and exterior application of painted plywood

PAINT BASE OVERLAYS

Paint Base Overlays for OSB, CLT and LVL

- Smooth and textured applications
- 26-29% core resin content (C-staged)
- 105 g/m² based unbleached Kraft
- Special grey or white primer formulation as top coat
- For exterior applications like sidings and doors



FIREPOINT® FIRE RETARDANT OVERLAY

Firepoint® Fire Retardant Overlays are durable, high performance overlays for a variety of substrates, including plywood and OSB. Easily installed and lightweight, FirePoint overlays expand, creating a carbonaceous char that is significantly less flammable than underlying substrates. Slowing a fire's progress, Firepoint gives firefighters more time to effect rescues and stop the fire from spreading further.

- Durable, high-performance for a variety of substrates, including OSB and plywood
- Easily installed and lightweight
- Tested accordingly to U.S. ASTM E-2768 Standard test for Surface Burning Characteristics of Materials, passing both 10- and 30-minute burn tests
- For exterior walls, roofs — anywhere fire-rated panels are required



LMX™ WEATHER BARRIER STRUCTURAL SURFACE OVERLAY

LMX™ overlays are the integral ingredient in an innovative sheathing and tape system that outperforms house wrap with easy-to-use, two-step installation. LMX provides an integrated water- and air-resistant barrier that streamlines weatherization and provides a continuous air barrier to reduce air leakage.

- Proprietary acrylic saturating resin system that creates a water-resistant, flexible, scrub- and abrasion-resistant surface that can also act as a moisture vapor barrier
- For interior walls and ceilings, areas under roof soffits, parking structures, industrial kitchens and more
- Can be embossed
- Achieves excellent Cobb ring testing results
- Contains no added formaldehyde

GRAPHX™ DECORATIVE EXTERIOR SURFACE OVERLAYS

From sheds to military structures, temporary housing to construction site buildings, Arclin's GraphX™ decorative overlays for outdoor applications are a high performing, low-emitting surface option that can provide visual cover or aesthetic intensity while also standing up to the elements — heavy rain, standing water, snow, high winds and more. Available with decorative print or uni-color.

- Decorative surface overlays for exterior applications — paving the way to use OSB on weather-exposed structures
- High performing, low-emitting with a UV-inhibiting and weather resistant exterior coating for durability and design flexibility
- For sheds, temporary structures and housing, construction site buildings and more
- Stand up for 5-10 years (after which they can be painted, should designs begin to fade)
- Primary or secondary press-ready
- Lightweight and easy to install



GraphX™

OVERLAY HANDLING

- Stacking overlay units affects the condition of the overlay at the lay-up station. Cover-boards should be of sufficient stiffness to distribute the weight of stacked overlay over an area greater than the sticker face.
- Preserve the protective plastic wrap when opening a unit of treated overlay. Overlay needs to be rewrapped before being returned to inventory.
- Ambient temperatures and humidity can reduce the performance of overlays. Moisture pick-up will promote excessive resin flow while moisture loss reduces flow and can cause poor bonds and overlay surface quality.
- Use inventory on a first-in, first-out basis. Overlay over six months old should be sampled and sent to the Arclin lab for flow tests before using. Inspect overlay during lay-up to avoid using contaminated paper.
- Press timers, temperature, pressure and temperature recovery should be checked before pressing overlays. Re-check after each product changeover.
- Platen surfaces or cauls used should be inspected for dents, scratches, resin deposits and other potential degrading irregularities. Remove foreign materials from the substrate and overlay surface to assure consistent quality production.

- Inspect panel surfaces as panels are removed from the press to reduce panel fall-down.
- Adherence to established Arclin press schedules is necessary for quality production. Panels being loaded into a multiple-opening hot press need to be positioned directly above one another to assure full pressure to the complete panel surfaces.
- Pre-cure resulting from overlays being too close or exposed to heated press platens prior to the press reaching full pressure will affect the quality of the overlay product produced. Most resin systems are tolerant of two minutes pre-cure at 285°F from the time of exposure to full pressure.
- Post-cure is critical to the field service of overlaid panels. Panels remaining in the press for an extended time after the press has opened are subject to warp from uneven drying of the panel surfaces and to overlay checking. Recommended post-cure time should not exceed two minutes.

LIST OF PRODUCTS

CONCRETE FORMING for plywood

MDO
MCFO
CCFO
HDO

For plywood, OSB and more

PREPRIMED EXTERIOR

ReadyPaint
ReadyPrime (with and without glue line)

PROTECTIVE

LMX™
FIREPOINT®

DECORATIVE

GraphX™ (décor and uni-color)

Arclin®
Performance Applied

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