

Isogrip[™] adhesives

—
for structural assembly



We are passionate, tenacious, solvers who thrive on developing practical, innovative, and elegant solutions to complex problems in assembly and structural bonding, always pushing the boundaries of what's possible, and advancing the competitiveness of our customers in the laminating and product assembly industries.

Our people bring exceptional product knowledge, technical support and industry insights to help our customers amplify the efficacy, refine the usability, add to the allure, ensure the integrity, and improve the profitability of their products and applications.

Isogrip adhesives are user-friendly adhesives that chemically react with the presence of moisture to form a thermosetting bond. Made up of one component, 100 percent solids, they contain no VOCs or formaldehyde and are non-flammable.

In a typical application, Isogrip adhesive is coated onto a core material and misted with a controlled amount of water. The core is then covered by the skin substrates and a stack is made. The stack is then pressed for a specific period of time. During the press cycle, the moisture reacts with the adhesive to cure.

When cured, these ICC-ES recognized adhesives offer excellent resistance to water, heat, chemicals and humidity.

Isogrip adhesives provide costs savings in both labor and materials and are easy to handle, use, clean and dispose of and will work on most substrates.

Application and curing methods

Isogrip adhesives can be applied via hand roller, roll coater, extruder or swirl coater. They can be curing via hot press, nip roll or cold press.

Isogrip urethane adhesives react chemically in the presence of moisture to form thermosetting bonds. In a typical application, Isogrip adhesives are coated onto a core material and misted with a controlled amount of water. The core is then covered by a skin substrate, and a stack of "skinned" cores is made. The stack is pressed for a specific period of time during which the moisture reacts with the adhesive to cure and create a permanent bond. Isogrip adhesive is easily cleaned up using a dibasic ester solvent.

APPLICATIONS

Because of their high performance bond strength and excellent resistance to weathering and heat, Isogrip adhesives are recognized and used in a number of structural applications.

Structural insulated panels

- ICC-ES AC05 recognized adhesive for laminated panels of oriented strand board (OSB) skins to expanded polystyrene foam
- This adhesive performs well with other substrates and foams, but must be qualified by manufacturers

Patio enclosures

- ICC-ES AC05 recognized adhesive for laminated panels of coated metal and plastic foam
- Finished panels offer superior strength and span performance

RV panel, garage door, architectural panel

- Bonds laminated panels of coated metal or reinforced plastic composites to multiple foam types.
- Offers a deep foam penetration for strong and durable bonds

Exterior entry doors

- Bonds laminated door components such as wood, metal and composite skins to expanded polystyrene cores and wood stiles and rails
- Listed by Intertek as a certified fire door component

Product Series	Description	Product Specifications		
2000	<ul style="list-style-type: none"> - Excellent adhesion on coated or primer backed metals - Developed for patio enclosures (primed aluminum skins to expanded polystyrene cores) - Other bondable substrates include: OSB, particleboard, plywood, hardboard, FRP and vinyl - ICC-ES code recognition - Winter and summer versions available 	Product	Closed Assembly	Press Time
		2020D	45 min	3.5 hrs
		2030D	30 min	2.5 hrs
		Conditions: Room temperature (68°F), 20-95% relative humidity		
3000	<ul style="list-style-type: none"> - Versatile bond performance on a number of substrates - Best choice for composite materials such as ABS, HDPE, HDPP, FRP and Kydex - Primer coat necessary for metal applications to achieve structural adhesion - Developed for architectural panels, patio enclosures, exterior entry doors, structural insulated panels (SIPs) - ICC-ES code recognition - Winter and summer versions available 	Product	Closed Assembly	Press Time
		3020D	35 min	2 hrs
		3030D	30 min	1 hrs
		Conditions: Room temperature (68°F), 20-95% relative humidity		
4000	<ul style="list-style-type: none"> - Rapid curing performance for continuous processing applications - Excellent adhesion performance on coated metal skins, various wood substrates and expanded polystyrene cores - Developed for patio enclosures, exterior entry doors, structural insulated panels (SIPs), refrigerated cooler panels - ICC-ES code recognition for 4010 and 4020 - Highly catalyzed products; require bead extrude 	Product	Closed Assembly Time	Press Time
		4005	6 min	8 min
		4010	2.3 min	3.5 min
		4020	2.45 min	3 min
		4030	2.2 min	3 min
		Conditions: Room temperature (68°F), 20-90% relative humidity		
5000	<ul style="list-style-type: none"> - Offers the best combination of closed assembly time and press time - One adhesive for coated metals and composite materials, including ABS, HDPE, HDPP, FRP, vinyl and Kydex - Developed for the patio enclosure market – provides excellent structural adhesion performance - ICC-ES code recognition 	Product	Closed Assembly	Press Time
		5040	55 min	75 min
		5050	40 min	60 min
		Conditions: Room temperature (68°F), 20-95% relative humidity		
7000	<ul style="list-style-type: none"> - Excellent adhesion performance on FRP and coated metal - Long term durability in winter and summer conditions - Developed for exterior entry doors, and FRP and coated metal skins laminated to expanded polystyrene foam cores 	Product	Closed Assembly Time	Press Time
		7200	40 min	3 hrs
		7250	35 min	2 hrs
		7300	35 min	1.5 hrs
		Conditions: Room temperature (68°F), 20-90% relative humidity		

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Each of these five qualities can manifest in different ways for different industries. Our customers enjoy better product integrity from ingredients that are of consistent quality, naturally derived, or have less environmental impact than competitive ingredients. Often, our team of solvers help our customers manufacture their products more profitably. Ultimately, downstream users – be they processors or end consumers – benefit from goods that are more effective, more easily used, more environmentally compatible, or more appealing. It is in these ways that Ashland's people around the globe are always solving.

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