



Green Polyurethane™ Indoor Floor Coating Application Instructions FLI4W (different colors)

Rev. – 10.27.12

FLI4W– floor coating is designed for indoor applications

Surface Preparation	<p><u>Substrate Repairs:</u></p> <p>Repair and fill any deep spalls, control joints and cracks to appropriate standards.</p> <p><u>Cleaning of Surface:</u></p> <p>Surfaces must be properly prepared, cleaned and dried prior to application of FLI4W. Prepare surface by mechanical means such as sandblasting, shot blasting, grinding, etc. Remove any dirt, dust, oil, grease, laitance, rust, scale, paint, curing compounds, acids, chemicals or any other contaminants. Remove oil and grease with a degreaser. TSP (trisodium phosphate) is recommended. Make sure surface is completely dry before commencing application of FLI4W.</p> <p><u>Old Concrete:</u></p> <p>FLI4W can be applied on old concrete with or without a primer depending on its condition. If there is significant wear, follow the “Primer Application” instructions below.</p> <p><u>New Concrete:</u></p> <p>Allow new concrete to cure for a minimum of 30 days, prior to application of FLI4W. Apply a thin prime coat of conventional primer (non-water-based) used for epoxy or polyurethane systems to reduce out-gassing.</p>
Mixing	<p>Pre-condition: The FLI4W product must rest at + 50-77 °F (+ 10-25 °C) for a minimum 24 hours before using. Note: Part B of FLI4W has a melting point of +10 °C, which makes the product viscous and difficult to mix and apply at low temperatures. Therefore, when mixing at 50 °F (10 °C) or less ambient temperatures, the material should first be heated to a temperature of 68-77 °F (+ 20-25 °C).</p> <p>Once ready to use, thoroughly pre-mix component A and B separately before use in order to disperse pigmentation (and some modifiers) evenly into solution (not required for natural (clear) color material). Pre-mix containers with a Jiffy mixer (see Figure 1) for a minimum of 3 minutes until a homogeneous mix with no streaks is achieved. Recommended speed of stirrer is 300-400 rounds per minute. In the case of big volume containers (drums or pails), accurately measure required volume of the components A and B in separate, clean, graduated, plastic containers. Keep mix batch sizes to 3 gallons or less to allow for adequate time to apply the mixed product within the pot life of the material.</p> <p>After mixing each component individually, component B should be placed directly into the container with component A. Mix the two components together with a Jiffy mixer for 2 minutes. Recommended speed of stirrer is 300-400 rounds per minute. Keep mixing blade submerged to avoid bubbles and pay special attention to the edges of the mixing container. After mixing, immediately pour the entire bucket of mixed material on the floor and begin application.</p>
Filled Systems	<p>Mix Parts A and B according to instructions above. Then immediately add dried quartz sand (0.15 – 0.3 mm) or other suitable filler at ratio 1: 0.6-1.2 while mixing</p>



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	<p>(or decant mixture of Parts A and B into a clean container and then add dried filler).</p> <p>Then thoroughly mix for another 2 minutes or until you reach an acceptable application viscosity (quantity of filler is usually max: 30-50%).</p> <p>Apply immediately after mixing in order to prevent sedimentation of sand.</p> <p>If aggregate needs to remain at the surface of the material for non-skid application purposes, keep the thickness of the coating less than the size of the aggregate.</p>
<p>Application Methods</p>	<p><u>No Primer Application:</u></p> <p>In some cases, due to its exceptional adhesive, self-priming and self-leveling properties, FLI4W does not need a primer (refer to an application specialist to be sure). Simply apply your desired thickness of FLI4W in one layer. As long as the depth of any holes or cracks in the concrete are less than the thickness of the coating you intend to apply, FLI4W will automatically fill the cracks and holes while at the same time achieving a self-leveling uniform, flat, glossy surface. Note: be sure to follow “Cleaning of Surface” instructions prior to application of material as noted above.</p> <p>Pour mixed material onto the floor immediately after mixing and create needed thickness using a notched squeegee. Backroll with a nap roller to remove any squeegee marks and achieve a smooth finish. Then backroll with a spiked roller to remove any bubbling. To ensure a uniform finish, continue to apply product along the edge of a recently coated area where the edge is still wet (Applying new product to a dry edge may leave a noticeable line). If required, apply top-coat within 24 hours of base coat application.</p> <p>Examples of recommended application tools are included below for your convenience (Figure 2).</p> <p>Primer Application:</p> <p>If a primer is specified, use FLI4W (which can be used as a primer) or other conventional (non-water-based) epoxy primer. The thickness of the primer layer should be sufficient to seal all pores and cracks. To fill voids and other physical imperfections of the substrate, avoid pin holing in order to ensure a smooth surface coating. Pour out FLI4W or other conventional epoxy primer and use a thin roller or backside of notched squeegee to pull material throughout the surface of the substrate. Then, apply top coat of FLI4W within 24 hours according to “No Primer Application” above.</p>
<p>Anti-Slipping Systems</p>	<p>As soon as material has been applied, broadcast with aggregate to excess (clean, dry sand, quartz, aluminum oxide, glass chips, shredded rubber, PVC chips, etc.). Allow base coat to set, then sweep off excess aggregate and apply top coat if specified. Apply top-coat within 24 hours of base coat application.</p>
<p>Repairs and Maintenance</p>	<p>Small repairs to cuts in the coating can be made by brushing on FLI4W after scuffing the damaged area with a sander. Re-applying FLI4W after 24 hours of initial application generally requires the use of sanding to achieve optimum adhesion.</p>
<p>Clean-up</p>	<p>Clean skin with soap and water. Immediately clean spillages, equipment and</p>

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and Disposal	tools with warm water and soap (TSP is recommended) or with a solvent (e.g. ethanol or methyl ethyl ketone) while the product is still wet. Cured product can only be removed mechanically. Cured product may be disposed of without restriction. Un-cured hardener and resin portions should be mixed together and disposed of in a normal manner.
Storage, Shipping and Handling	<p>Keep in a well-ventilated place in tightly sealed containers. Protect from frost. Keep away from heat, direct sunlight and acids. Store product in a dry location in factory sealed containers at 50 to 90°F (10-32°C). Minimum product shelf life is 6 months in factory-sealed containers.</p> <p>FLI4W component A and cured materials are Class 55 and not regulated by US DOT shipping regulations. FLI4W component B has US DOT Hazard Class 8 (corrosive) PG III.</p> <p>Avoid contact with skin and eyes, inhalation of high concentration of vapors. Use only in well ventilated areas. When using do not eat, drink or smoke.</p>
Safety	Refer to Material Safety Data Sheets.

Application temperature	°F (°C)		+ 50-77 (+ 10-25)
Pot life at temperature:	°F (°C) min		50 (10) 59 (15) 77 (25) 60 40 20
Curing time at temperature: ❖ Dry-To-Touch Time ❖ Walk on ❖ Full cure	°F (°C) hours hours days	ASTM D1640	50 (10) 59 (15) 77 (25) 12 8 4 48 30 20 14 10 5

Note: At higher temperatures the time of hardening and pot life are reduced.

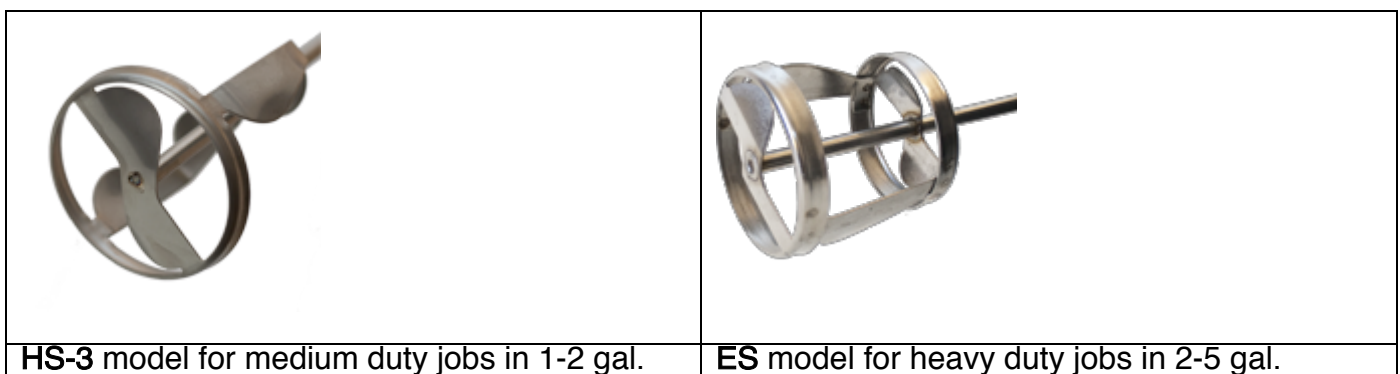


Figure 1. Examples of Jiffy mixers





	
	<p>Spiked Roller</p>
	
<p>Nap Roller</p>	<p>Nap Roller</p>

Figure 2. Examples of recommended instruments