



PL[®] Premium[®] Construction Adhesive

Description: Loctite PL Premium Construction Adhesive is a one component, polyurethane based, moisture-curing adhesive. It is VOC compliant and contains no chlorinated solvents or water. Loctite PL Premium provides superior adhesion to most common construction materials. Since the bonding strength of PL Premium is so strong, it offers twice the coverage of conventional adhesives therefore much less adhesive is required to complete projects. PL Premium can be used for interior or exterior projects and is 3 times stronger than ordinary solvent based construction adhesives during initial 24 hour cure. It is also waterproof, paintable and cures even in cold temperatures. Ideal for sub floor installations.

Available As:

Item #	Size	Package
1390595 1446547	10 fl oz (295 ml)	Paper Cartridge
1390594 1447063	28 fl oz (828 ml)	Paper Cartridge

Features & Benefits:

- Permanently Bonds Almost Any Substrate
- Water-Resistant
- Non-Shrinking
- Up to 3x the Strength of Conventional Adhesives
- Broad Service Temperature
- Meets and exceeds APA AFG-01 specs

Recommended For:

Loctite PL Premium bonds to most common construction materials such as wood, plywood, OSB, MDF, treated wood, hardwood flooring, concrete, stone, granite, marble, slate, masonry, brick, foam insulation of all sorts including EPS (expanded polystyrene foam), XPS (extruded polystyrene foam), and polysio (urethane) foam, carpets, metal, stainless steel, galvanized metal, lead, cement-based products, fiber cement panels, ceramic, fiberglass, drywall, rigid and cellular vinyl/PVC trim and molding and polyash trim.

For Best Results:

Not recommended for the following applications:

- ABS, tub surrounds and other solid sheet goods made from rigid polystyrene
- Water submersion applications
- Polyethylene, polypropylene, flexible vinyl (FPVC)
- Polyethylene (PE) films that cover certain XPS or EPS foam insulation board
- Bitumen coated surfaces
- Certain materials such as rubbers and plastics may have bonding difficulties. Test before use



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Coverage:

For a 10 fl. oz. (295 ml) cartridge:

- A 1/4" (6 mm) bead extrudes approximately 30.6 ft. (9.3 m)
- A 3/8" (9.5 mm) bead extrudes approximately 13.6 ft. (4.1 m)

For a 28 fl. oz. (828 mL) cartridge:

- A 1/4" (6 mm) bead extrudes approximately 86 ft. (26 m)
- A 3/8" (9.5 mm) bead extrudes approximately 38 ft. (12 m)

Typical Uncured Physical Properties:

Color:	Tan	
Appearance:	Thick paste	
Base:	Polyurethane	
Odor:	Minimal	
Specific Gravity:	1.26	
Flashpoint:	250°F (121°C)	
Viscosity:	555,000 cps	5 rpm @ 75°F (24°C)
Solids Content:	90% by weight	
VOC Content:	4% by weight	CARB
	45 g/l	SCAQMD rule 1168
Shelf Life:	12 months from date of manufacture (unopened)	
Lot Code Explanation:	3L4028HP11	
Stamped on bottom plunger of cartridge for 295 ml	4 = Last digit of year of manufacture 028 = Day of manufacture based on 365 days in a year	
Stamped on plastic nozzle for 825 ml	Example: 4028 = 28th day of 2014 = January 28, 2014	

Typical Application Properties:

Application Temperature:	Apply and cure between 19°F (-7°C) and 95°F (35°C)	
Open Time:	15-20 minutes*	@ 78°F (25°C) and 50% R.H.
Repositioning Time:	30-45 minutes*	@ 78°F (25°C) and 50% R.H.
Clamping Time:	24 hours	
Cure Time:	24 to 48 hours*	@ 78°F (25°C) and 50% R.H.
	*Time is dependent on temperature, humidity, porosity of substrate and amount of adhesive applied	

Typical Cured Performance Properties:

Color:	Tan	
Cured Form:	Non-flammable rubbery solid	
Service Temperature:	0°F (-18°C) to 160°F (71°C) 0°F (-18°C) to 250°F (121°C)	Long Term (Continuous) Short Term (Intermittent)
Water Resistant:	Yes	
Compression Shear Strength:	ASTM D3498	
Dry Lumber:	638 psi (4.4 N/mm ²)	
Wet Lumber:	404 psi (2.8 N/mm ²)	
Frozen Lumber:	773 psi (5.3 N/mm ²)	
Gap-Filling:	468 psi (3.2 N/mm ²)	
Moisture Resistance:	585 psi (4.0 N/mm ²) No delamination	
Bond Strength Development:	@73°F (23°C) Douglas Fir to Douglas Fir Plywood	
6 hours cure:	208 psi (1.4 N/mm ²)	



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8 hours cure:	279 psi (1.9 N/mm ²)	
16 hours cure:	450 psi (3.1 N/mm ²)	
24 hours cure:	542 psi (3.6 N/mm ²)	
Compression Shear Strength:		
Granite (unpolished) to Douglas Fir Plywood:	467 psi (3.2 N/mm ²)	7 day cure
Marble (unpolished) to Douglas Fir Plywood:	542 psi (3.7 N/mm ²)	7 day cure
Granite to Granite (unpolished):	371 psi (2.6 N/mm ²)	7 day cure + 24 hrs water immersion
Marble to Marble (unpolished):	305 psi (2.1 N/mm ²)	7 day cure + 24 hrs water immersion
Compression Shear Strength:		
OSB to Expanded cellular PVC:	263 psi (1.8 N/mm ²)	24 hour cure
PVC trim molding to Pine:	305 psi (2.1N/mm ²)	24 hour cure
Fiber cement to Douglas Fir plywood:	305 psi (2.1 N/mm ²) Substrate failure	7 day cure
Fiber cement to Douglas Fir plywood:	377 psi (2.6 N/mm ²) Substrate failure	14 day cure + 24 hrs water immersion
Tensile Shear Strength:		
Douglas Fir plywood to Stainless steel:	590 psi (4.1 N/mm ²) Substrate failure	
Douglas Fir plywood to Hot galvanized steel:	512 psi (3.5 N/mm ²) Substrate failure	
Shear Strength:		APA AFG-01
Wet Lumber		Bond area = 1.5 in ²
Douglas Fir:	785 lbs	
Southern Pine:	593 lbs	
Frozen Lumber		
Douglas Fir:	837 lbs	
Southern Pine:	762 lbs	
Dry Lumber		
Douglas Fir:	890 lbs	
Moisture Resistance		
Douglas Fir:	911 lbs	
Oxidation Resistance		Passed
Specifications:	Meets and exceeds the following specifications:	
	<ul style="list-style-type: none">• ASTM D3498• APA AFG-01• ASTM C557• Meets the performance requirements of HUD UM 60A• GreenGuard Certified	



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Directions:**Tools Typically Required:**

Utility knife, caulking gun, tool to puncture cartridge seal, spray mist water bottle.

Safety Precautions:

Wear gloves. Cured adhesive on bare skin will not come off immediately with washing and will cause skin to darken. Cured adhesive and discoloration will come off in about 3 days.

Preparation:

Use above 40°F (4°C). Surfaces must be clean and free of frost, standing water, grease, dust and other contaminants. Pre-fit all materials and protect finished surfaces. If using cartridge format, cut nozzle at a 45° angle to desired bead size and puncture inner seal. Be very careful not to allow Loctite® PL® Premium to cure on a finished surface.

Application:

Apply adhesive to one surface of the material being bonded. Press the surfaces firmly together within 15-20 minutes. Materials may be repositioned within 30-45 minutes after applying the adhesive. If bonding two non-porous surfaces (such as foam, metal and fiberglass), add water in the form of a very light or atomized spray from a plant mister bottle to the extruded adhesive. The repositioning time will then be reduced to less than 30 minutes. Use mechanical support for 24 hours while the adhesive cures. When bonding EPS and XPS foam insulation, avoid cure and surface temperatures above 90°F (32°C).

Clean-up:

Clean tools and uncured adhesive residue immediately with mineral spirits in a well-ventilated area to the outdoors. Remove cured adhesive by carefully scraping with a sharp-edged tool.

Storage & Disposal:

Not damaged by freezing. Store product at standard conditions which are defined as 72 ± 4°F (22° ± 2°C) and <50% relative humidity. After completion of work, seal cartridge nozzle tightly with aluminum foil. Wrap the foil tightly around the nozzle and seal it with tape. Applying petroleum jelly around the opening before sealing with aluminum foil can create a more airtight seal. Product cures with exposure to moisture. Use an approved hazardous waste facility for disposal.

Label Precautions:

WARNING! HARMFUL IF INHALED. EYE, SKIN AND RESPIRATORY IRRITANT. MAY CAUSE SKIN AND RESPIRATORY SENSITIZATION.

WARNING: Contains petroleum distillates and methylene diisocyanate (MDI). Individuals with lung or breathing problems or prior sensitization to isocyanates should not use this product. Avoid breathing vapors. Vapors may cause headaches, dizziness and nausea. Open windows and doors to ensure cross ventilation during application and until all odors are gone. Avoid contact with eyes and skin. Prolonged or repeated exposure may cause dermal or respiratory sensitization, effects may be permanent. Gloves recommended. **FIRST AID:** If swallowed, call a physician or Poison Control Center immediately. Do not induce vomiting. For eye contact flush with water for 15 minutes, call a doctor. For skin contact wash thoroughly with soap and water. If inhaled, move to fresh air. If symptoms develop or persist, get immediate medical attention. **INTENTIONAL MISUSE BY DELIBERATELY INHALING CONTENTS MAY BE HARMFUL OR FATAL. DO NOT TAKE INTERNALLY. KEEP OUT OF REACH OF CHILDREN.**

WARNING: This product contains chemicals known to the State of California to cause cancer.

Refer to Safety Data Sheet (SDS) for further information.

Limited Warranty:

User shall determine suitability of product for use and assumes all risk. Except as described in the No Call Back Limited Warranty, the sole and exclusive remedy is a refund of the purchase price or replacement of the product. For warranty service and details about the No Call Back Limited Warranty, call 1-800-624-7767 or visit loctiteproducts.com. You may also have other rights which vary from state to state.

Disclaimer:

The information and recommendations contained herein are based on our research and are believed to be accurate, but no warranty, express or implied, is made or should be inferred. Purchasers should test the products to determine acceptable quality and suitability for their own intended use. Nothing contained herein shall be construed to imply the nonexistence of any relevant patents or to constitute a permission, inducement or recommendation to practice any invention covered by any patent, without authority from the owner of the patent.



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Trusted Performance. Proven Results.

For over 50 years, Loctite Brand adhesives and sealants have taken on the toughest jobs. Used in race cars, airplanes, and even in the space-shuttle, Loctite provides solutions for the most demanding industrial, professional and consumer applications. Loctite gives you not the specialization, power and performance to not only get your job done, but to get it done right.

1-800-624-7767 – Mon-Fri - 9:00a – 4:00p ET

www.loctiteproducts.com



Loctite Brand is part of the Henkel family of brands. Founded in 1876, Henkel is a global leader in the consumer and industrial businesses. Henkel operates worldwide with leading brands and technologies in three business areas: Laundry & Home Care, Beauty Care and Adhesive Technologies.

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