

Revision: April 10, 2019 Supersedes: March 5, 2015 Ref. #: 459029

PL®500 Construction Adhesive

DESCRIPTION

Loctite® PL® 500® Landscape Construction Adhesive is an exterior, heavy-duty, premium quality adhesive designed to meet most landscaping needs. It delivers a quick and easy solution to installing the final course of cap with landscape blocks and the installation of cement paving stones. Excellent for landscaping projects, such as securing block walls and capstones and for bonding brick, stone, timbers, concrete, and wood. Loctite® PL® 500® Landscape Construction Adhesive may be used under a variety of moisture and temperature conditions ranging from sub-freezing to elevated temperatures.

Available As:

Item #	Package	Size
1683231	Plastic Cartridge	10 fl. oz. (295 ml)
1654392 1654393	Paper Cartridge	10 fl. oz. (295 ml)
1602122	Paper Cartridge	28 fl. oz. (828 ml)

FEATURES & BENEFITS

- Water and weather resistant
- Easy to gun in cold weather
- Provides a durable bond to multiple surfaces
- Easy solution for bonding the final course of cap stones or installing cement paving stones to a solid surface.
- Will bridge minor gaps when bonding irregular surfaces
- Bonds to wet and dry surfaces

RECOMMENDED FOR

Bonds to most common landscaping materials such as brick, stone, timbers, slate, concrete, and wood.

LIMITATIONS

- Pressure treated lumber must be well seasoned for at least 6 months weather exposure.
- Applications over hygroscopic salt-treated wood, such as, zinc chloride treatments are not recommended. These substances attract, absorb, and retain moisture.
- Water submersion applications or constantly damp environments. Wet surface application is possible if surfaces have the possibility to dry.
 - Plastics, such as, composite decking materials
- Areas of high heat, such as, fireplace openings or fire pit construction
- Will not bond to limestone or sandstone
- Landscape step construction not recommended for safety reasons.
- Recommend for exterior use only

COVERAGE

For a 10 fl. oz cartridge:

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

For a 28 fl. oz. cartridge:

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

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Technical Data Sheet

TECHNICAL DATA

Typical Uncured Physical Properties:				
Color:	Light Tan	Specific Gravity	1.44	
Appearance:	Thick paste	VOC Content:	0.25 % by weight (CARB) 7.5 g/L (SCAQMD rule 1168)	
Base:	Synthetic rubber and resins Formaldehyde free	Shelf Life:	18 months from date of manufacture (unopened)	
Viscosity:	210,000 cps	Flashpoint:	-17°F (1.4°F)	
Lot Code Explanation:	 18060 18 = Last Two Digits of Year of Manufacture 060 = Day of Manufacture based on 365 days per year 			
Example:	18060 = March 1, 2018			

Typical Application Performance Properties:				
Application Temperature:	Apply and cure between 0°F (-18°C) and below 100°F (38°C)	Clamping Time:	24 hours	
Odor:	Acetone -like	Cure Time:	2 to 7 days* at 78°F (25°C) and 50% RH	
Open Time:	15 minutes*	Clean Up:	Clean up uncured adhesive residue with acetone or mineral spirits. Scrape away cured adhesive using a sharp-edged tool. Follow solvent manufacturer's precautions for using solvents.	
Repositioning Time:	30 minutes*			

*Time is dependent upon temperature, humidity, porosity of substrate and amount of adhesive used

Typical Cured Performance Properties:				
Color:	Light Tan			
Cured form:	Non-flammable, hard solid			
Service Temperature:	-20°F (-29°C) to 150°F (66°C)			
Water Resistance:	Yes			
Compression Shear Strength, ASTM D3498:		Annlinghle Constituent		
Douglas Fir to Douglas Fir plywood		Applicable Specifications:		
Dry Lumber Bonding	283 psi (1.95 N/mm ²)	• ASTM D 3498		
Wet Lumber Bonding	g 227 psi (1.57 N/mm ²)			
Frozen Lumber Bond	ding 179 psi (1.23 N/mm ²)			
Gap Filling	279 psi (1.92 N/mm²)			

DIRECTIONS

Tools Typically Required:

Utility knife, caulking gun, tool to puncture cartridge seal.

<u>Safety Precautions:</u> Wear gloves to avoid skin contact and wash hands after use.



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DIRECTIONS

Preparation:

The temperature of the adhesive, the surfaces and the working area must be between 0°F (-18°C) and 100°F (38°C). For smooth, fast, easy application during cold weather, store adhesive at room temperature (70° \pm 5°F) 24 hours prior to use. Ensure surfaces to be bonded are clean, structurally sound and free of standing water, dust, grease, oil and/or other contaminants. Pre-fit all materials prior to applying product. Cut off tip of cartridge at 45° angle to desired bead size. For exterior applications, the recommended bead size is 3/8" (9.5 mm). Puncture seal inside of nozzle.

General Application Guidelines:

Apply a continuous zigzag bead to one surface to be bonded. Apply the adhesive at a rate so that the materials can be positioned and fastened within 15 minutes. All projects may require support until adhesive has cured. It is recommended that all foot traffic stay off of paver stones or retaining caps for at least 24 to 48 hours after installation and heavy traffic for approximately 4 to 5 days.

For Landscape Blocks:

When installing the cap onto the final course of landscape blocks, apply approximately 2" in from the front and 2" in from the back of the cap to be installed.

For Concrete Paving Stones:

Apply an "S" shaped bead to the back of the stone to be installed. If using old concrete, clean with a 20% muriatic acid solution, then rinse with clean water and allow to dry prior to applying adhesive.

Clean-up:

Clean tools and uncured adhesive residue immediately with acetone or mineral spirits in a well-ventilated area to the outdoors. Cured adhesive may be carefully cut away with a sharp-edged tool.

Alternate Application Method: Adhesive may be applied in continuous "S" pattern every 8 inches (20 cm) apart and only on flat sections that closely mate with existing wall surface.

NOTE: All application methods will require bracing for at least 24-48 hours to maintain contact while adhesive cures. Panel edges can be supported with masking tape. After 20 minutes hand press again over all areas of installation to ensure good contact. Connect seams of panels according to tub surround manufacturer instructions. Edges can be sealed after at least 24 hours after installation but not before hand. Allow at least 24 hours after sealing before using the area.

Clean-up:

Clean tools and adhesive residue immediately with mineral spirits. Loctite® PL® Premium Max can only be removed mechanically once cured.

STORAGE & DISPOSAL

Not damaged by freezing. For best results, store at $70^{\circ} \pm 5^{\circ}$ F in a cool, dry place. Store away from heat, flame and sparks. Take unwanted product to an approved household hazardous waste transfer facility. Hardened material may be disposed of with trash.

LABEL PRECAUTIONS

DANGER! Extremely Flammable. VAPORS MAY CAUSE FLASH FIRE. HARMFUL IF INHALED OR SWALLOWED. MAY CAUSE EYE, SKIN, AND RESPIRATORY IRRITATION.

DANGER! Contains acetone, methyl acetate, and crystalline silica. Vapors may ignite explosively. Do not use or store near heat, sparks or open flame. Do not smoke when using this product. Extinguish all flames and pilot lights and turn off all sources of ignition, including stoves, heaters and electric motors during use and until all vapors are gone. Prevent build-up of vapors by opening all windows and doors to achieve cross ventilation. Use in a well-ventilated area. Avoid breathing vapors. Avoid contact with eyes and skin. Prolonged or repeated exposure may affect the nervous system causing dizziness, headache or nausea. If you experience eye watering, headache or dizziness, leave the area to obtain fresh air. Do not take internally.

FIRST AID: If swallowed do not induce vomiting, call a physician or Poison Control center immediately. For eye contact flush with water for 15 minutes, call a physician. For skin contact, wash thoroughly with soap and water. If overcome by vapors, get fresh air. **KEEP OUT OF THE REACH OF CHILDREN.**

NOTICE: Reports have associated repeated and prolonged occupational overexposure to solvents with permanent brain, nervous system, liver and kidney damage, or may cause cardiac arrhythmia. INTENTIONAL MISUSE BY DELIBERATELY INHALING THE CONTENTS MAY BE HARMFUL OR FATAL.

WARNING: Cancer and Reproductive Harm - www.P65Warnings.ca.gov.

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



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