

# **TECHNICAL DATA SHEET**



PL® PREMIUM FAST GRAB
Construction Adhesive

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Loctite® PL® Premium Fast Grab is a revolutionary 100% moisture curing polyurethane construction adhesive that provides superior results and is safe to use. It may be used inside or outside and will last as long as the surfaces it joins together. PL Premium Fast Grab is 8 times stronger than ordinary solvent based construction adhesives <u>during initial 24 hour cure</u>. PL Premium Fast Grab has high initial tack making it ideal for securing vertical surfaces with less bracing required and is repositionable. Loctite PL Premium Fast Grab is virtually VOC free.

## **RECOMMENDED FOR:**

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.

## **NOT RECOMMENDED FOR:**

- 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

# **FEATURES & BENEFITS:**

Feature	Benefits	
4x more Initial Tack than Original PL Premium Construction Adhesive	Compared to Original Formula, can hold objects 4x the weight without bracing while wet	
Virtually VOC Free	< 2 % by weight	
Meets and exceeds APA AFG-01 and ASTM D3498 specs	Can be applied directly to wet, frozen or treated lumber	
High Strength	Stronger than many substrates it joins together. Up to 8 times the strength of conventional adhesives during initial 24 hours	
Water resistant	Can be used outdoors; Ideal for humid areas	
Low odor	No strong solvent odour; excellent for indoor projects	
Twice the coverage	Less adhesive required due to the expansion of the adhesive as it cures	
Long open time	Extended repositioning time	



Item #	Package	Size
1417170	Paper	10 fl oz
1655973	Cartridge	(295 mL)

## **COVERAGE**

A 10 fl. oz. cartridge will extrude approximately 30.6 ft. (9.3 m) of a ¼" (6 mm) diameter bead.

## **DIRECTIONS**

#### **Tools Typically Required:**

Utility knife, caulking gun, tool to puncture cartridge seal, plant mister bottle containing water.

#### Safety Precautions:

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

#### Preparation:

Use above 41°F (5°C). For easier application, ensure the product temperature is 59°F (15°C) or higher. Surfaces must be clean and free of frost, standing water, grease, dust and other contaminants. Pre-fit all materials and protect finished surfaces. Cut nozzle at a 45° angle to required opening, usually ¼ inch or wider. Puncture the inner seal of the cartridge. The foil seal must be completely opened using a tool of similar size as the opening. Be very careful not to allow PL Premium Fast Grab to cure on a finished surface.

#### **Application:**

Apply adhesive to one surface of the material being bonded. Press the surfaces firmly together. Materials may be repositioned within 20 minutes after applying the adhesive. If bonding two non-porous surfaces (such as foam, metal and fiberglass) or under very dry conditions (less than 30% relative humidity), 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 15 minutes. Use mechanical support for 24 hours while the adhesive cures. Cure time is dependent upon temperature, humidity, porosity of substrate and amount of adhesive used. Low temperature and humidity will slow cure time. When bonding EPS and XPS foam insulation, avoid cure and surface temperatures above 90°F (32°C).

#### Clean-up:

Clean tools and adhesive residue immediately with mineral spirits. Loctite® PL® Premium Fast Grab must be removed mechanically once cured.

## STORAGE AND DISPOSAL

Not damaged by freezing. 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 methylene diisocyanate (MDI). Individuals with lung or breathing problems or prior sensitization to isocyanates should not use this product. Avoid breathing vapors. 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 Poison Control Center immediately. Do not induce vomiting. For eye contact flush with water for 15 minutes, call a physician. For skin contact, wash thoroughly with soap and water. If inhaled, move to fresh air. If symptoms develop or persist, get immediate medical attention. DO NOT TAKE INTERNALLY. KEEP OUT OF THE REACH OF CHILDREN.

**WARNING:** This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.

Refer to the Material Safety Data Sheet (MSDS) for further information

## 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.

\*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.

## **TECHNICAL DATA**

**Typical Uncured Physical Properties: Typical Application Properties** 

Color: Grey Application Temperature: The adhesive should be above 41°F (5°C) and below 95°F (35°C) for application

Appearance: Thick paste Odor: Minimal

Open Time: 20 minutes Viscosity: 18,000 cps

Clamping Time: 24 hours Specific Gravity: 1.30

24 to 48 hours 78°F @ (25°C) and 50% RH Cure Time:

**VOC Content:** 1.7% by weight (22 g/L) Note: Cure time is dependent upon temperature, humidity, porosity of substrate and amount of

Shelf Life: 12 months from date of manufacture adhesive used. (unopened)

Clean Up: Clean up uncured adhesive residue with Lot Code Explanation:

mineral spirits. Scrape away cured adhesive 3L3028HP11 using a sharp-edged tool.

ASTM C 557

& Schools

FHA Bulletin UM-60a.

Green Guard Certified

Green Guard Certified for Children

0 = Last Digit of Year of Manufacture

028 = Day of Manufacture based on

365 days per year For example:

Polyurethane

3028 = January 28, 2013

# Typical Cured Performance Properties

Color: Water Resistance: Yes Grey

Cured form: Non-flammable, hard solid Specifications: **ASTM D 3498** APA AFG-01

Service Temperature:

Base:

0°F (-18°C) to 160°F (71°C) Long Term: Short Term: 0°F (-18°C) to 250°F (121°C)

Compression Shear Strength, ASTM D3498:

Douglas Fir to Douglas Fir plywood

809 psi (5.6N/mm<sup>2</sup>) **Dry Lumber Bonding** 

Wet Lumber Bonding 671 psi (4.6 N/mm<sup>2</sup>)

683 psi (4.7 N/mm<sup>2</sup>) Frozen Lumber Bonding

Gap Filling 631 psi (4.4 N/mm<sup>2</sup>)

Moisture Resistance 867 psi (6.0 N/mm<sup>2</sup>)

no delamination

Bond Strength Development\* @ 73°F (23°C):

Douglas Fir to Douglas Fir plywood

360 psi (2.5 N/mm<sup>2</sup>) 6 hours cure

8 hours cure 618 psi (4.3 N/mm<sup>2</sup>)

706 psi (4.9 N/mm<sup>2</sup>) 16 hours cure

24 hours cure 862 psi (5.9 N/mm<sup>2</sup>)

Stone Bonding: Compression Shear Strength:

Granite (unpolished) to Douglas fir plywood (7 day cure) 865 psi (6.0 N/mm²)

Marble (unpolished) to Douglas fir plywood (7 day cure) 950 psi (6.6N/mm²)

Granite to Granite (unpolished, 7 day cure followed by 24 658 psi (4.5 N/mm²)

hours water immersion)

Marble to Marble (unpolished, 7 day cure followed by 24 423 psi (2.9 N/mm²)

hours water immersion

Compression Shear Strength to Various Substrates:

OSB to expanded cellular PVC (24 hour cure) 365 psi (2.5 N/mm²)

Wood failure

PVC trim molding to pine (24 hour cure) 624 psi (4.3 N/mm<sup>2</sup>)

Fiber cement to Douglas Fir plywood (7 day cure) 389 psi (2.7 N/mm²)

Substrate failure

Fiber cement to Douglas Fir plywood 380 psi (2.6 N/mm²)

(14 day cure followed by water immersion and drying) Wood failure

Tensile Shear Strength (Lap Shear Strength):

Douglas Fir Plywood to stainless steel 777 psi (5.4 N/mm<sup>2</sup>)

Wood failure

Douglas Fir Plywood to hot galvanized steel 665 psi (4.6 N/mm²)

Wood failure