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TECHNICAL DATA SHEET

LOCTITE®

PL 400® VOC
Subfloor & Deck Adhesive

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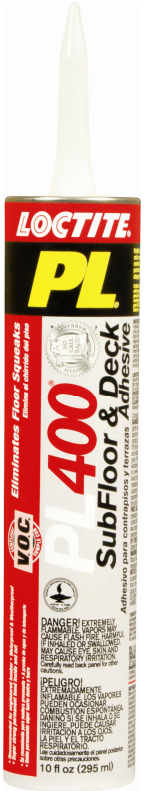

Item #	Package	Size
1390598	Paper Cartridge	10 fl. oz.
1390596	Paper Cartridge	28 fl. oz.

DESCRIPTION

Loctite® PL 400® VOC Compliant Subfloor & Construction Adhesive provides a powerful, permanent bond and is formulated for all heavy duty interior or exterior construction. Cold weather formula for easier extrusion and excellent adhesion in all weather conditions. Bonds dry, wet, frozen and treated lumber to most building materials. Offers fast set and superior strength and development. Low VOC formulation meets stringent State and Federal VOC regulations.

RECOMMENDED FOR:

Loctite® PL 400® VOC can be used in most interior and exterior construction projects either on the job or the production line. It bonds all wood to wood assemblies dry, wet or frozen. Primarily designed for on-site bonding of subfloor and plywood decking to joists during cold weather. Loctite® PL 400® VOC is suitable for use in drywall, plaster, metal, masonry, concrete, brick, ceramic tile, slate, treated lumber and most other projects requiring an adhesive. Ideal for use in prefab or modular construction.

NOT RECOMMENDED FOR:

- Polyethylene (PE), polypropylene (PP), polytetrafluoroethylene (PTFE) and acrylic
- Unlined expanded or extruded polystyrene plastic foams
- Permanent water immersion
- Applications requiring temperature resistance greater than 150°F or below -20°F (-29°C)
- Mirrors, tub and shower surrounds

FEATURES & BENEFITS:

Feature	Benefits
Waterproof and Weather Resistant……	Great for indoor or outdoor projects
Cold weather gunnable……	Eliminates “roll-up” on frozen lumber
Meets and exceeds APA AFG-01 specs……	Can be applied directly to dry, wet or frozen lumber
Bonds to most building materials……	Provides a strong, durable bond to multiple surfaces
Gap filling……	Will bridge minor gaps when bonding irregular surfaces; Reduces squeaking and splitting
High Grab……	Reduces the use of fasteners

COVERAGE

For a 10 fl. oz. cartridge:
A ¼” (6 mm) bead extrudes approximately 30.6 ft (935 m).
A 3/8” (9.5 mm) bead extrudes approximately 13.6 ft. (4.1 m).

For a 28 fl. oz. cartridge:
A ¼” (6 mm) bead extrudes approximately 85.8 ft (26.1 m).
A 3/8” (9.5 mm) bead extrudes approximately 38.1 ft (11.6 m).

DIRECTIONS

Tools Typically Required:
Utility knife, caulking gun

Safety Precautions:
Interior applications require ventilation to the outside during application and cure. Wear gloves. Wash hands after use.

Preparation:
The temperature of the adhesive, the surfaces and the working area must be between 10°F (-12°C) and 100°F (38°C). For smooth, fast, easy application during cold weather, store adhesive at room temperature (70° ± 5°F) 24 hours prior to use. Ensure surfaces to be bonded are clean, dry, structurally sound and free of dust, grease, oil or other contaminants. To increase adhesion, sand glossy surfaces to a dull finish. 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.

Application:
Using a caulking gun, apply adhesive in a continuous bead to joists, studs or back side of siding or panels, whichever is appropriate. Ensure that all outer edges and centers are adequately supplied with adhesive to ensure a complete and total bond. Use nails sparingly for support and as an aid to alignment during installation. Repositioning time is approximately 15 minutes. After use, wipe off nozzle tip and recap immediately.

General Construction Use:
Pre-cut and fit materials before applying adhesive. All materials should be glued together within 15 minutes after adhesive application. If work is delayed, remove excess adhesive and begin again.

Subfloor and Decking:
Apply continuous beads (1/4" to 3/8") of adhesive to all floor joists. For tongue and groove panels, apply 1/4" beads to groove avoiding excess "squeeze out". Position panels allowing 1/8" gap for expansion at butt joints and nail within 15 minutes after adhesive application. Use proper nailing method as designated by APA Adhesive Nail-On Schedule.

Pre-Finished Panels:
Apply continuous beads of adhesive to studs or furring strips. For wall surfaces, prepare surface accordingly and apply continuous parallel beads 12-16 inches O.C. Position panel and press firmly in place. Use finishing nails or mechanical fasteners along top and bottom edges to hold panels in place. Temporary blocking of panels may be necessary until adhesive sets.

Drywall:
Apply adhesive in same manner as for paneling. Permanent mechanical fasteners are required 16 inches O.C. around perimeter of panels. Field fasteners may be required if gypsum board shows evidence of warping. Note: Field fasteners are required 24 inch O.C. for all ceiling applications in addition to perimeter fasteners when using adhesives.

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.

STORAGE AND DISPOSAL

Not damaged by freezing. For best results, store at 70° ± 5°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. Contains xylene, methyl acetate and acetone. Prevent build-up of vapors. Vapors may cause flash fires. Use only in areas of cross ventilation. Open all windows and doors during application and curing. Keep away from heat, sparks and open flame. Avoid breathing vapors. Avoid prolonged or repeated skin contact. **KEEP OUT OF REACH OF CHILDREN. Warning!** Contains materials listed by the state of California as known to cause cancer, birth defects or other reproductive harm. **FIRST AID:** In case of eye contact flush immediately with plenty of clean water for at least 15 minutes. For skin, wash thoroughly with soap and water. If swallowed, do NOT induce vomiting. Consult physician immediately. Overexposure to vapors is irritating to eyes and respiratory tract. May cause headaches and dizziness and is an anesthetic. If overcome by vapors remove to fresh air.

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.

TECHNICAL DATA

Typical Uncured Physical Properties

Color:	White
Appearance:	Thick paste
Base:	Synthetic rubber and resins
Odor:	Solvent
Specific Gravity:	1.22
Flash Point:	9°F (-12.78°C)
VOC Content:	3% by weight (50 g/L)
Shelf Life:	18 months from date of manufacture (unopened)
Lot Code Explanation:	YYDDD YY = Last two digits of year of manufacture DDD = Day of manufacture based on 365 days in a year
(Lot code is stamped on bottom plunger of cartridge)	For example: 09061 = 61st day of 2009 = March 2, 2009

Typical Application Properties

Application Temperature:	Apply and cure between 10°F (-12°C) and 100°F (38°C)
Repositioning Time:	15 minutes
Full Cure Time:	2 to 7 days Cure time depends upon temperature, humidity, porosity of substrate and amount of adhesive used.

Typical Cured Performance Properties

Color:	White
Cured Form:	Non-flammable solid
Service Temperature:	-20°F (-29°C) to 150°F (66°C)
Water Resistance:	Yes
Specifications:	▪ Tested and approved for HUD-FHA application per UMB No. 60 ▪ Exceeds American Plywood Association specifications AFG-01 ▪ ASTM D 3498-93 ▪ Meets all California state CARB, OTC States and Federal VOC regulations