



Technical Bulletin

2400 Boston Street, Suite 200, Baltimore, Maryland 21224
Phone: 410-675-2100 or 800-543-3840

Revised: 6/25/2013

DAP® SMARTBOND™ Subfloor Construction Adhesive – Gun-Grade

- **8X more coverage than standard cartridge adhesives**
- **One can of SMARTBOND™ Subfloor Adhesive equals the coverage of eight 28 oz. cartridges of subfloor adhesive**
- **Use with Applicator Gun for faster and easier application and precise bead control**
- **25% faster to apply – less gunning, less change out, less fatigue**
- **Unique foam collapses to form a high-strength adhesive gel**
- **Polyurethane formula provides strong, durable and permanent bond to a wide variety of building materials**
- **Bonds wet, frozen and treated lumber**
- **Reusable for up to 30 days**
- **Bridges gaps and voids**
- **Exceeds ASTM D3498 shear strength tests for wet, frozen and dry lumber**

Packaging: Net Wt. 20 oz. (567 g) aerosol can
Color: Tan
UPC Number: 0 70798 00042 1

Company Identification:

Manufactured For: DAP Products Inc., 2400 Boston St., Suite 200, Baltimore, Maryland 21224
Usage Information: DAP HELPLINE: 1-888-DAP-TIPS or www.dap.com and click on "Ask the Expert".
Order Information: 800-327-3339
Fax Number: 410-558-1068

Product Description:

DAP® SMARTBOND™ Subfloor Construction Adhesive is a dynamic polyurethane adhesive foaming gel that is faster and easier to use than traditional cartridge adhesives. Jobs become more efficient as a single can of **SMARTBOND™** provides 8X the coverage of cartridge adhesives, meaning you can do more with less. The unique technology applies as a foam and transforms by collapsing into a high-strength, fast-curing adhesive gel that bonds to wet, dry, frozen and treated lumber. Screw top attaches to the Applicator Gun for faster and easier application and precise bead control. Provides increased ease-of-use for labor-intensive framing. Reduces nailing, floor squeaks and nail pops. Excellent adhesion and gap bridging with a 20 minute open time. Interior/exterior use. For use in all 50 states.

Suggested Uses:

- Wet, frozen and treated lumber
- Dimensional lumber, OSB and Enhanced OSB
- Wood to wood assemblies
- Glued floor systems
- Plywood

Surface Preparation & Application:

SAFETY FIRST! PRODUCT IS EXTREMELY FLAMMABLE WHEN DISPENSING. Before using, read & understand all health & safety information/product use instructions found below.

1. Pre-cut and fit materials before applying adhesive.
2. Keep fingers off of the trigger until ready to apply.
3. Never point the nozzle at yourself or others.
4. Always assume that the Applicator Gun is pressurized.
5. Surface must be clean, dry and free of dirt, dust and other contamination.
6. Always wear safety glasses, gloves and protective clothing during use.
7. Shake the can well before using and intermittently during use.
8. Attach adhesive Applicator Gun to the adhesive can. Do not over tighten. Ensure threads are aligned to prevent leakage.
9. Slowly adjust and set the control knob to for desired flow.
10. Gently pull the trigger to release foam adhesive.
11. Apply a continuous bead to floor joists, with nozzle slightly above work surface. Product works best on horizontal surfaces. Not for overhead use.
12. Within 20 minutes, install the subfloor panels and follow published nailing/fastening schedule.
13. Completely shut off control knob when leaving the Applicator Gun unattended.

Storage & Reuse:

Store the Applicator Gun attached to partially used adhesive can for up to one month. If longer storage is required, remove the Applicator Gun from the adhesive can and clean as directed. To prolong storage, it is recommended to purge the Applicator Gun weekly with a short discharge of adhesive foam into a waste receptacle. Once the Applicator Gun is removed from the adhesive can, the shelf life of DAP® SMARTBOND™ Subfloor Construction Adhesive is greatly diminished. It is not recommended to store partially used adhesive cans without the Applicator Gun attached.

For Best Results:

- To speed cure in low humidity, lightly mist joists with water before application.
- Not recommended for applications other than subfloor and deck installations.
- Not for continuous water submersion.
- If using on concrete, allow concrete to cure fully (at least 28 days).
- Store above 60°F. Product will gun slowly when cold.

Clean-up of Tools & Substrates:

Clean the Applicator Gun by removing the adhesive can and replacing it with a can of DAP® SMARTBOND™ Cleaner. Shake the can and discharge into a trash receptacle. Repeat 3 or 4 times or until discharge is clear and free of adhesive residue. Remove can of DAP® SMARTBOND™ Cleaner and tighten down the control valve on the gun for storage. Do not use DAP® SMARTBOND™ Cleaner to clean skin. Wipe off excess uncured adhesive with a paper towel. Use DAP® SMARTBOND™ Cleaner or acetone to dissolve and remove uncured construction adhesive from surfaces. Cured adhesive must be mechanically removed. Test surfaces to ensure surface is compatible with Cleaner before cleaning.

Uncured adhesive may be cleaned up with DAP® SMARTBOND™ Cleaner for Applicator Gun & Construction Adhesive or acetone. Cured adhesive cannot be removed with solvents. DO NOT use acetone or other solvents to remove product from skin. SKIN CONTACT: Wipe excess uncured adhesive off with a paper towel or rag immediately. Wash off remaining uncured adhesive immediately with soap and water. Remaining uncured residue may be removed with petroleum jelly or baby oil. For cured adhesive, first soak in warm soapy water and then apply petroleum jelly. Cured adhesive will wear off in time.

Typical Physical & Chemical Characteristics:

Vehicle:	Polyurethane
Volatile:	Organic Solvent
Flash Point:	-143°F
Weight/Gallon:	8.26 lbs.
Odor:	Mild
Color:	Tan
Consistency:	Aerosol
Bridging:	Up to 1/8" gap

Shear Strength:	500 - 800 psi
Application Temperature Range:	23°F to 105°F
Optimum Can Temperature:	50°F to 86°F
Service Temperature Range:	-40°F to 195°F
Open Time:	20 Minutes (1/2" bead)
Full Cure:	24 Hours
Reusability:	Up to 30 days when stored as directed
Interior/Exterior Use:	Yes
Freeze/Thaw Stability:	Yes
Coverage:	20 oz. can yields approximately 400 linear feet at 1/2" bead
Shelf Life:	12 months
MSDS No.:	00010127004

Safety:

Danger! Extremely flammable. Vapors may cause flash fire. Contents under Pressure. Irritant. Vapor harmful. May cause irritation to skin, eyes and lung. May cause sensitization by inhalation or skin contact. **INDIVIDUALS WITH LUNG OR BREATHING PROBLEMS SUCH AS ASTHMA OR PRIOR REACTION TO ISOCYANATES MUST NOT BE EXPOSED TO VAPOR.** May affect the brain or nervous system causing dizziness, headache or nausea. **NOTICE:** Reports have associated repeated and prolonged occupational over-exposure to solvents with permanent brain and nervous system damage. Intentional misuse by deliberately concentrating and inhaling vapors may be harmful or fatal. Harmful if swallowed. Use only with adequate ventilation. Do not breathe vapor. Ensure fresh air entry during application and curing by opening all windows and doors and using fans or other means of ventilation. Avoid contact with skin and eyes. Wear protective clothing, protective gloves and eye protection. Vapor may ignite explosively. Keep away from heat, sparks and flame. Do not smoke. Extinguish all flames and pilot lights. Turn off stoves, heaters, electrical motors, and other sources of ignition during use and until vapor is gone. Do not puncture, strike or incinerate can. Exposure to heat or prolonged exposure to sun may cause bursting. Do not expose to heat or store at temperature above 120°F. Cured product is combustible and may present a fire hazard if exposed to flame or temperatures above 240°F. **FIRST AID:** SKIN: DO NOT use solvents to remove product from skin. Wipe excess uncured product off with a paper towel immediately and wash with warm, soapy water. Remaining uncured residue can be removed with petroleum jelly or baby oil. For cured product, soak in warm soapy water, then apply petroleum jelly. Cured product will wear off in time. Remove contaminated clothing. EYE: Immediately flood with large quantities of water. INHALATION: Remove to fresh air. INGESTION: DO NOT INDUCE VOMITING. Get medical attention immediately if complications arise from any exposure. **For emergencies,** call your Poison Control Center at 1-800-222-1222. See product label and Safety Data Sheet (SDS) for additional information. For an SDS contact your supplier or visit www.dap.com.

LIMITED WARRANTY:

DAP Products Inc. warrants that this product, when applied in accordance with DAP's label, technical bulletins and applicable industry standards, will be free from defects in material for 12 months from the date of purchase, but makes no warranty as to appearance or color. Since methods of application and on-site conditions are beyond DAP's control and could affect performance, DAP makes no other warranties, express or implied, including the warranties of Merchantability or Fitness for a Particular Use or Purpose. If a product defect is encountered, call 1-888-DAP-TIPS for warranty fulfillment. You must have your sales receipt and product container available when you call. DAP's **sole** liability is either to supply replacement product or refund the purchase price. DAP will in no event be liable for incidental or consequential damages.