



# TECHNICAL DATA SHEET

2400 Boston Street | Suite 200 | Baltimore, MD | 21224

## DAP® SMARTBOND® Subfloor Construction Adhesive

### PRODUCT DESCRIPTION

**DAP SMARTBOND SUBFLOOR** is a high strength polyurethane foam adhesive 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. An easy to use screw top easily threads onto the Applicator Gun for faster and easier application and precise bead control. SMARTBOND Subfloor provides increased ease-of-use for labor-intensive framing. Reduces nailing, floor squeaks and nail pops & delivers a tenacious bond as well as gap bridging properties with a 20-minute open time. Interior/exterior use. For use in all 50 states.



PACKAGING	COLOR	UPC
Net Wt. 20 oz (567 g)	Tan	7079800042

### KEY FEATURES & BENEFITS

- **8X More Coverage** - One can provides same yield as (8) 28oz cartridges of adhesives
- **25% Faster to Apply** - Less change out and faster to apply to complete large jobs faster
- **Polyurethane Formula** – Provides a strong, durable and permanent bond

### PERFORMANCE CHARACTERISTICS

- Reusable for up to 30 days when left on applicator gun
- Collapsible foaming gel adhesive
- Gap bridging
- Adheres to wet, frozen & treated lumber
- Meets ASTM D3498 specification for subfloor installation



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## SUGGESTED USES

### Adheres To:

- Dimensional Lumber
- Metal
- OSB
- Moisture Resistant OSB
- Plywood
- Wood

### Recommended For:

- Subfloor & Decking Installation

### Not Recommended For:

- Bonding two non-porous materials
- Constant water exposure
- Mirror installation
- Applications other than subfloor & decking installation

## FOR BEST RESULTS

Store partially used canisters on adhesive applicator gun for up to one month. DAP SMARTBOND Construction Adhesive cures with reaction to moisture in the atmosphere. To prolong storage, it is recommended to purge applicator weekly with a short discharge of adhesive in a waste receptacle.

## APPLICATION

### Safety:

#### To reduce risk of personal injury:

Read and understand these instructions before use. Save these instructions for further reference.

- Read and understand all labels, Safety Data Sheets and instructions on the product canister to be used with this applicator gun before use. Read and understand all additional product warnings contained on the SMARTBOND canister. Refer to product container for first aid instructions.
- Some foam products such as polyurethane foam may contain isocyanates such as toluene diisocyanate (TDI) and methylene diphenyl diisocyanate (MDI). Isocyanates may cause irritation to eyes, skin and lung. They may also 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. Wear protective clothing, gloves and eye protection. 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.
- Some foam products may contain flammable hydrocarbon solvents as their blowing agent. These products are extremely flammable. Their vapor may ignite explosively or cause flash fire. Ensure adequate ventilation. Keep SMARTBOND canister away from heat, sparks and flame. Do not



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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.

- Foam products containing hydrocarbon solvents may affect the brain or nervous system causing dizziness, headache or nausea. Reports have associated repeated and prolonged occupational over-exposure to solvents with permanent brain and nervous system damage. Do not breathe vapors. Use only with adequate ventilation. Leave work area immediately and get fresh air if you feel lightheaded and dizzy. Intentional misuse by deliberately concentrating and inhaling vapors may be harmful or fatal.
- Foam containers are under pressure. Do not puncture, strike or incinerate can. Do not expose to heat or store at temperature above 120°F. Exposure to heat or prolonged exposure to sun may cause container to burst. Do not place in hot water.
- Foam products will adhere to skin and clothing if contact occurs. Avoid contact with skin and eyes. Wear protective clothing, gloves and eye protection. In case of skin contact, do not use solvents to remove product from skin. Wipe excess uncured adhesive foam off with a paper towel immediately and wash with warm, soapy water. Remove the remaining uncured residue with petroleum jelly or baby oil. If adhesive foam has cured, the exposed skin can be soaked in warm soapy water and removal may be attempted using petroleum jelly or baby oil. Any adhesive foam which remains will wear off over time.
- When cured, most foam products, including polyurethane foam, are combustible and may present a fire hazard if exposed to flame or temperatures above 240°F. Do not expose cured foam to open flames. Do not use the product around fireplaces, furnaces, heaters, lighting fixtures or in or around any application that generates heat or sparks.
- Keep all bystanders, including children, a safe distance from work area.
- Product may spray more than intended if nozzle opening is set too high.
- Apply product only to work surface. Never point applicator gun at face, any part of the body or any other person. Keep applicator gun pointed down when not in use.
- Check for tight connection between SMARTBOND canister and applicator gun to avoid leaks at the connection point.
- Do not put hand over applicator gun tip.
- Keep fingers off applicator gun trigger until ready to use.
- Never leave applicator gun without completely shutting off the control knob.
- Do not use if either applicator gun or SMARTBOND canister is damaged or malfunctioning.

## **Instructions:**

### *Canister Attachment:*

1. Surface must be clean, dry and free of dirt, dust and other contamination.
2. Always wear safety glasses, gloves & protective clothing during use.
3. Completely shut off applicator gun control knob.
4. Firmly screw canister onto applicator gun. Do not over tighten. Ensure threads are aligned to prevent leakage.
5. Shake can well before using & intermittently during use.
6. Adjust and set control knob for desired flow. When not in use, and to avoid accidental discharge, tighten control knob clockwise to lock trigger in place.
7. Pull trigger to release adhesive. The dispenser applicator trigger can also be used to control adhesive flow rate. The harder it is pulled the faster the rate of dispensing.
8. Apply a continuous bead to substrate, with nozzle slightly above work surface.



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9. Use DAP TOUCH 'N FOAM® Professional Polyurethane Foam Cleaner or acetone to wipe up spills and foam residue. Do not use acetone or DAP TOUCH 'N FOAM Professional Polyurethane Foam Cleaner to clean skin.

### **Changing DAP SMARTBOND Canister:**

1. Be sure DAP SMARTBOND canister is empty and all pressure is released from canister by discharging into an appropriate waste receptacle.
2. Unscrew emptied canister while holding in applicator gun trigger being sure to point applicator gun nozzle into an appropriate waste receptacle.
3. Use DAP TOUCH 'N FOAM Professional Polyurethane Foam Cleaner to clean applicator gun basket of residual adhesive.
4. Immediately attach new canister of DAP SMARTBOND construction adhesive to applicator following canister attachment instructions.

### *Cleaning and Storage of DAP SMARTBOND Construction Adhesive and Applicator Gun:*

Store with applicator attached to partially used adhesive canister for up to one month. If longer storage is required remove applicator from canister and clean as directed. Shelf life of DAP SMARTBOND Construction Adhesive is greatly diminished once applicator gun is removed. It is not recommended to store partially used canisters without the applicator gun attached.

1. Clean applicator by removing the adhesive canister and replacing it with a can of DAP TOUCH 'N FOAM Professional Polyurethane Foam Cleaner.
2. Firmly thread the DAP TOUCH 'N FOAM Professional Polyurethane Foam Cleaner canister on to dispenser applicator. Do not over tighten. Ensure threads are aligned to prevent leakage.
3. Shake canister and discharge into a trash receptacle. Repeat 3 or 4 times or until discharge is clear and free of foam residue. Always dispose of waste in accordance with all applicable regulations.
4. Remove DAP TOUCH 'N FOAM Professional Polyurethane Foam Cleaner and tighten control knob clockwise for storage. The Cleaner can also be used to clean up wet adhesive foam spills and tools. Test surfaces to ensure surface is compatible with Cleaner before cleaning. Do not clean skin with Cleaner.

## TYPICAL PHYSICAL & CHEMICAL PROPERTIES

Typical Uncured Physical Properties	
Appearance/Consistency	Collapsing foam gel
Base Polymer:	Polyurethane
Bead Color	Tan
Weight % Solids	N/A
Odor	Mild
Clean Up	Mineral spirits
Flash Point	Not Applicable
Shelf Life	24 months
Coverage	½" bead yields approx. 400 linear feet



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<b>Typical Application Properties</b>	
Application Temperature Range:	23°F – 105°F
Tooling Time (Working Time)	20 minutes
Full Cure Time	24 hours
<b>Typical Cured Performance Properties</b>	
Service Temperature Range:	-40°F – 195°F
Gap Bridging	Up to 1/16"
VOC Content	< 185g/L
Calif. ARB VOC	<15 Wt/Wt%

## CLEAN UP & STORAGE

Cleaning and Storage of DAP SMARTBOND Construction Adhesive and Applicator Gun:  
Store with applicator attached to partially used adhesive canister for up to one month. If longer storage is required remove applicator from canister and clean as directed. Shelf life of DAP SMARTBOND Construction Adhesive is greatly diminished once applicator gun is removed. It is not recommended to store partially used canisters without the applicator gun attached.

1. Clean applicator by removing the adhesive canister and replacing it with a can of DAP SMARTBOND Applicator Gun & Construction Adhesive Cleaner.
2. Firmly screw the DAP SMARTBOND Applicator Gun & Construction Adhesive Cleaner canister on to dispenser applicator. Do not over tighten. Ensure threads are aligned to prevent leakage.
3. Shake canister and discharge into a trash receptacle. Repeat 3 or 4 times or until discharge is clear and free of foam residue. Always dispose of waste in accordance with all applicable regulations.
4. Remove DAP SMARTBOND Applicator Gun & Construction Adhesive Cleaner and tighten control knob clockwise for storage. The Cleaner can also be used to clean up wet adhesive foam spills and tools. Test surfaces to ensure surface is compatible with Cleaner before cleaning. Do not clean skin with Cleaner.

## SAFETY

See product label and Safety Data Sheet (SDS) for health and safety information. You can request an SDS by visiting our website at [dap.com](http://dap.com) or by calling **1-888-DAP-TIPS**.

## WARRANTY



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DAP will provide replacement product or refund sales price if product fails to perform when used as directed. Call 1-888-DAP-TIPS, with your sales receipt and product container available, to arrange for warranty fulfillment. DAP is not liable for incidental or consequential damages.

## COMPANY IDENTIFICATION

**Manufacturer:** DAP Products Inc., 2400 Boston Street, Baltimore, Maryland 21224

**Usage Information:** Call **1-888-DAP-TIPS** or visit [dap.com](http://dap.com) & click on "Ask the Expert"

**Order Information:** 800-327-3339 or [orders@dap.com](mailto:orders@dap.com)

**Fax Number:** 410-558-1068

**Also, visit the DAP website at [dap.com](http://dap.com)**