

Sheetrock® Setting-Type Joint Compounds



Durabond®

For one-day drywall finishing

- For interior gypsum panels and exterior gypsum ceiling boards
- Unique humidity resistance
- Exceptional bond, low shrinkage
- Unusual check-crack resistance in heavy fills
- Choice of setting times

Description

SHEETROCK® brand DURABOND® setting-type joint compounds for drywall interiors and exteriors save time and money by permitting same-day joint finishing, and, usually, next-day decoration. They are ideal for heavy fills and are virtually unaffected by humidity.

These easy-to-mix chemically setting powder compounds provide low shrinkage and superior bond, which make them excellent for laminating gypsum panels to gypsum panels, to sound-deadening boards, and to above-grade concrete surfaces. In addition, DURABOND setting-type joint compounds can be used for filling, smoothing and finishing interior concrete ceilings and above-grade concrete. Other uses include finishing joints in exterior gypsum ceiling boards and presetting joints in veneer plaster finish systems.

To meet varying job requirements, a full line of DURABOND joint compounds has been developed to provide a choice of approximate setting times. DURABOND 20 joint compound sets in about 20-30 minutes; DURABOND 45 joint compound sets in about 30-80 minutes; DURABOND 90 joint compound sets in about 85-130 minutes; and DURABOND 210 joint compound sets in about 180-240 minutes.

Limitations

1. DURABOND setting-type joint compounds are more difficult to sand and smooth after drying and should be smoothed before set or while damp, but not completely hardened.
2. Setting action cannot be delayed or prevented by dilution with water.
3. Do not apply over moist surfaces or surfaces likely to become moist, or on below-grade surfaces or surfaces projecting outside building structure unless protected from direct exposure to moisture.
4. Cure new interior concrete surfaces 60 days or more before using DURABOND setting-type joint compounds. Remove protrusions, ridges, form or parting oils, grease and efflorescence.
5. Prior to using any epoxy coating over any surface treated with joint compound, consult the epoxy coating manufacturer and follow manufacturer's recommendations regarding the preparation or suitability of substrates for the epoxy coating. Many epoxy coatings exert significant shear stress on the substrate as the strong epoxy film shrinks while curing/drying. This stress can cause the bond of the joint compound to fail, resulting in delamination problems.

Application

Preparation

In cold weather during gypsum panel joint finishing, a minimum surface, water, mix and air temperature of 45 °F must be maintained until joints are completely dry. Adequate ventilation shall be provided to carry off excess moisture.

Gypsum Panel Joint Treatment

Position and apply SHEETROCK® gypsum panels according to manufacturer's recommendations. Mix DURABOND joint compound according to directions on bag. If using SHEETROCK gypsum panels, SW edge, prefill the "V" grooves formed by abutting edges with DURABOND 45 or 90 joint compound. Apply compound directly over "V" groove with a flexible 5" or 6" joint finishing knife. Wipe off excess compound applied beyond the groove. Allow the prefill compound to harden prior to the next application. Cover joint with a thin layer of compound and embed fiberglass or paper joint tape, leaving about 1/32" of compound under feathered edge and a thin layer over the tape. After compound has set, apply second coat, feathering out approximately 2" beyond first coat. After setting, apply third coat, feathering out 2" beyond second coat. After each coat is applied, smooth away any tool lap marks or other imperfections prior to setting action. Finish fastener heads with three coats of joint compound; finish corner bead and inside corners as required with at least two coats, feathered and smoothed out onto panel faces.

Note: For easier sanding and smoothing, use SHEETROCK® EASY SAND™ setting-type joint compound or a SHEETROCK® ready-mixed joint compound for second and third coats.

Decorating

For priming and decorating with paint, texture or wallcovering, follow manufacturer's directions for materials used. All surfaces must be dry, dust-free and not glossy. A prime coat of SHEETROCK® First Coat primer or a quality interior latex flat wall paint with high solids content should be applied undiluted and allowed to dry before decorating. Walls to be covered with wallpaper or vinyl wallcovering should be sealed per manufacturer's recommendations. To improve fastener concealment where gypsum panel walls and ceilings will be subjected to severe artificial or natural side lighting and decorated with a gloss paint (eggshell, semigloss or gloss), the gypsum panel surface should be skim-coated with SHEETROCK® all-purpose joint compound or COVER COAT® compound to equalize suction before painting (see publication J510). As an alternative to skim coating, or where a Level 5 finish is required, use SHEETROCK® TUFF-HIDE™ primer-surfacer.

Use with Veneer Plaster

Apply according to normal procedure. However, when building temperature/humidity conditions may result in rapid drying (see publication PM5), or when steel-framed systems at 24" o.c. with single-layer gypsum base and single-coat veneer plaster finish are specified in either rapid or normal drying conditions, use paper joint tape embedded with DURABOND 90 joint compound. A fill or cover coat that completely hides the tape is required. This cover coat must be allowed to set before plastering. Plaster prefill is not required over DURABOND joint compound.

Filling and Finishing Over Interior Poured Concrete Ceilings

Grind high plane differences in concrete level with adjacent area; also remove any form oil, efflorescence and greasy deposits. Prime exposed metal with a good rust-inhibitive primer. Fill offsets or voids with DURABOND joint compound. Apply additional coats as necessary after each coat has set but not necessarily dried to create crack-free fills that eliminate edge joinings from showing through the surface decoration. Take care to create a smooth surface free of irregularities on sections that will be exposed to sharply angled lighting. Apply a thick skim coat of DURABOND setting-type joint compound over entire surface. Skim coat must be thick enough to prevent dryout before setting, or bond failure may result. For easier sanding, use COVER COAT compound or SHEETROCK® all purpose ready-mixed joint compound for final skim coat. After final coat of joint compound has dried, apply undiluted coat of SHEETROCK First Coat primer or a quality latex flat wall paint with high solids content over entire surface and allow to dry. For textured ceiling, apply a uniform coat of SHEETROCK® ceiling spray texture QT at a rate not exceeding 10 ft.²/lb.

Exterior Joint Treatment

Mix DURABOND joint compound according to directions on bag. Do not overmix or use in temperatures below 45 °F (7 °C). Prefill joints of SHEETROCK® exterior gypsum ceiling board with joint compound. After prefill has set, embed paper joint tape, centered over joint. When compound has set, immediately apply fill coat. Apply joint compound over flanges of zinc control joints, corner beads and metal trim. Spot fastener heads. After fill coat has set, apply finishing coat of joint compound. Completely cover all joints, angles, beads, control joints and fasteners. After joints have dried, apply one coat of a quality oil or latex exterior primer. Then follow with at least one coat of a quality latex exterior paint.

Use with SHEETROCK® MOLD TOUGH™ Gypsum Panels

In areas to be tiled, for joining tapered panel edges, embed fiberglass or paper joint tape with DURABOND 45 or 90 joint compound. When set, apply a fill of DURABOND 45 or 90 joint compound. Take care not to crown the joint. Wipe excess joint compound from the panel surface before it sets. For butt joints and interior angles, embed fiberglass or paper joint tape with DURABOND 45 or 90 joint compound. A fill coat is not necessary. Again, take care not to crown the joint. Spot fastener heads at least once with DURABOND 45 or 90 joint compound.

In areas not to be tiled, embed tape with DURABOND 45 or 90 joint compound in the conventional manner. Finish joints with at least two coats of a SHEETROCK joint compound to create a smooth surface for painting and wallpapering.

Fill and seal all openings around pipes, fittings and fixtures with a coat of thinned tile adhesive. For best results, use Type I Ceramic Tile Adhesive that meets ANSI A136.1; this material may also be used to set the tile. With a 1" brush, apply the thinned adhesive onto the raw gypsum panel core at cutouts, and allow area to dry thoroughly prior to application of tile. Before adhesive dries, wipe excess material from the surface of gypsum panels.

Laminating

Apply DURABOND joint compound in the prescribed manner to back of the face panels to be laminated. Laminate face panels to (base layer panels) (coreboard) using moderate pressure and temporary nailing or shoring to ensure adequate bond.

Repairing Handball and Racquetball Court Walls

Repair surface damage (gouges, scratches, surface imperfections) in handball and racquetball court walls and other interior wall and ceiling surfaces finished with STRUCTO-BASE® plaster or STRUCTO-GAUGE® plaster. Clean surface of dust, residue and other contaminants. Prepare DURABOND 45 or 90 joint compound by mixing into a solution of 1 part water and 1 part ACRI-ADD™ acrylic fortifier. Use prepared mixture to refinish surface damage. Initial application over deep areas should be set and partially dry prior to application of subsequent coats. Finish to a smooth surface. This same procedure may be used in repair of surface damage to STRUCTOCORE® security wall systems constructed using STRUCTO-BASE plaster and IMPERIAL® veneer finish. See SA1119, *Security Wall Systems*.

Use With USG Gypsum Accelerator

USG™ high-strength gypsum accelerator added to DURABOND joint compound will reduce the setting time. USG gypsum accelerator should be sprinkled in dry form into the mixed compound. For hand-mixing, dry accelerator can be added either to the dry mix or mixed compound. Never add USG gypsum accelerator directly to water or mix it with water to form a solution before adding it to the compound. Doing so will significantly reduce its ability to accelerate the set.

Accelerator Amount		Approximate Set Time (Minutes)		
Tablespoon Per Bag	Tablespoon Per Bread Pan	DURABOND 90	DURABOND 45	DURABOND 20
1.0	0.22	40	20	10
2.0	0.44	30	10	–
6.0	1.33	20	–	–

- "Bread pan" volume estimated at 10 cups (80 oz.)
- Wet-mixed volume of DURABOND joint compound approx. 2.8 gallons (45 cups) per bag

Product Data

Color: Natural
Filler: Calcium sulfate
Mixing (potable water): Approximately 24 to 32 qt./100 lb. (50 to 67 L/100 kg of DURABOND setting-type joint compound). Refer to bag for specific mixing directions.
Density (dry bulk): 40 lb./ft.³ (641 kg/m³)
Freezing Sensitivity: None after set, but not necessarily dry
Coverage: Average 72 lb./1000 ft.² (35.2 kg/100 m²) of gypsum panels
Compliance with Standards: Meets ASTM Standard C475
Storage: Close open bags as tightly as possible and store in a dry place
Shelf Life: Up to 9 months under protected storage conditions
Packaging: 25 lb. (11.3 kg) kraft bags

Submittal Approvals

Job Name	
Contractor	Date

Product Information

See usg.com for the most up-to-date product information. **WARNING!** When mixed with water, this material hardens and then slowly becomes hot. Do not attempt to make a cast enclosing any part of the body using this material. Failure to follow these instructions may cause severe burns that may require surgical removal of affected tissue. Avoid inhalation of dust and eye contact. Dust generated by sanding may cause eye, skin, or respiratory tract

irritation. Use wet-sanding to avoid creating dust. If dusty, wear a NIOSH/MSHA-approved respirator. Prolonged and repeated exposure to mica may cause lung disease. Wear eye protection. If eye contact occurs flush thoroughly with water for 15 minutes. If irritation persists, call physician. Do not ingest. If ingested, call physician. Product safety information: 800 507.8899. **KEEP OUT OF REACH OF CHILDREN.**

Trademarks

The following trademarks used herein are owned by United States Gypsum Company or a related company: ACRY-ADD, COVER COAT, DURABOND, EASY SAND, IMPERIAL, MIDWEIGHT, MOLD TOUGH, SHEETROCK, STRUCTO-BASE, STRUCTO-GAUGE, STRUCTOCORE, TUFF-HIDE, USG.

Note

Products described here may not be available in all geographic markets. Consult your USG sales office or representative for information.

Notice

We shall not be liable for incidental and consequential damages, directly or indirectly sustained, nor for any loss caused by application of these goods not in accordance with current printed instructions or for other than the intended use. Our liability is expressly limited to replacement of defective goods. Any claim shall be deemed waived unless made in writing to us within thirty (30) days from date it was or reasonably should have been discovered.

Safety First!

Follow good safety/industrial hygiene practices during installation. Wear appropriate personal protective equipment. Read MSDS and literature before specification and installation.

