

Diamond® Veneer Basecoat



For economical two-coat residential and light-commercial applications

- Superior workability for faster, easier application.
- Excellent base for a variety of plaster finishes.
- High coverage—as much as 4,000 to 5,000 sq. ft. per ton.

Description

DIAMOND® brand veneer basecoat provides quality walls and ceilings for residential and light-commercial construction where the superior strength of IMPERIAL® brand veneer basecoat is not required. Its superior workability provides high production rate with exceptionally good coverage. It produces a monolithic base with regulated suction, resulting in exceptional integral bond and a beautiful finish. DIAMOND veneer basecoat is applied from 1/16" to 3/32" thickness to IMPERIAL® gypsum base; to porous concrete block; and to USG™ plaster bonder on the following surfaces: monolithic concrete, FIBEROCK® brand abuse-resistant panels and DUROCK® cement board.

DIAMOND veneer basecoat is formulated to receive a variety of finishes. For applicators who require a hard finish with the convenience of a single-bag product, DIAMOND® interior finish is the appropriate choice. For high productivity and the ultimate in workability, choose a conventional gauged-lime putty finish: RED TOP® finish plaster, a mill-mixed product offering single-bag convenience and good workability with moderate hardness; RED TOP® gauging plaster and lime; or RED TOP® Keenes cement lime sand for sand texture and other texture finishes.

Limitations

1. Over interior monolithic concrete, FIBEROCK abuse-resistant panels or DUROCK cement board, USG plaster bonder must be applied before plastering.
2. Gypsum plaster should not be used where it will come in contact with water or excessive moisture.
3. Plaster application on masonry or concrete walls, or ceilings that have been coated with bituminous compounds or other waterproofing agents, is not recommended. Interior surfaces of exterior walls should be furred and lathed prior to plastering to prevent damage from seepage and condensation.
4. Basecoat plaster must not die or stop against a hollow metal doorframe return. Dampen trim return vibration by grouting and using special anchors. The grout must be raked out to allow space for gypsum base to be inserted in the frame.

Directions

Preparation

Protect from moisture during storage and on the job. In cold weather, heat building interior to a minimum of 55 °F (13 °C) for an adequate period before the application of plaster, while basecoat and finish are being applied, and until the finish is dry. Air circulation should be kept at a minimum during application and until proper set has been achieved.

Joint Treatment

Normal drying conditions Apply IMPERIAL® tape over all joints (edges and ends). Do not overlap at intersections.

Align pressure-sensitive Type P tape over joints and press in place over entire length. To eliminate wrinkles and ensure maximum adhesive bond, press the entire length of the tape with a steel finishing knife or trowel; press the tape into corners with a corner tool.

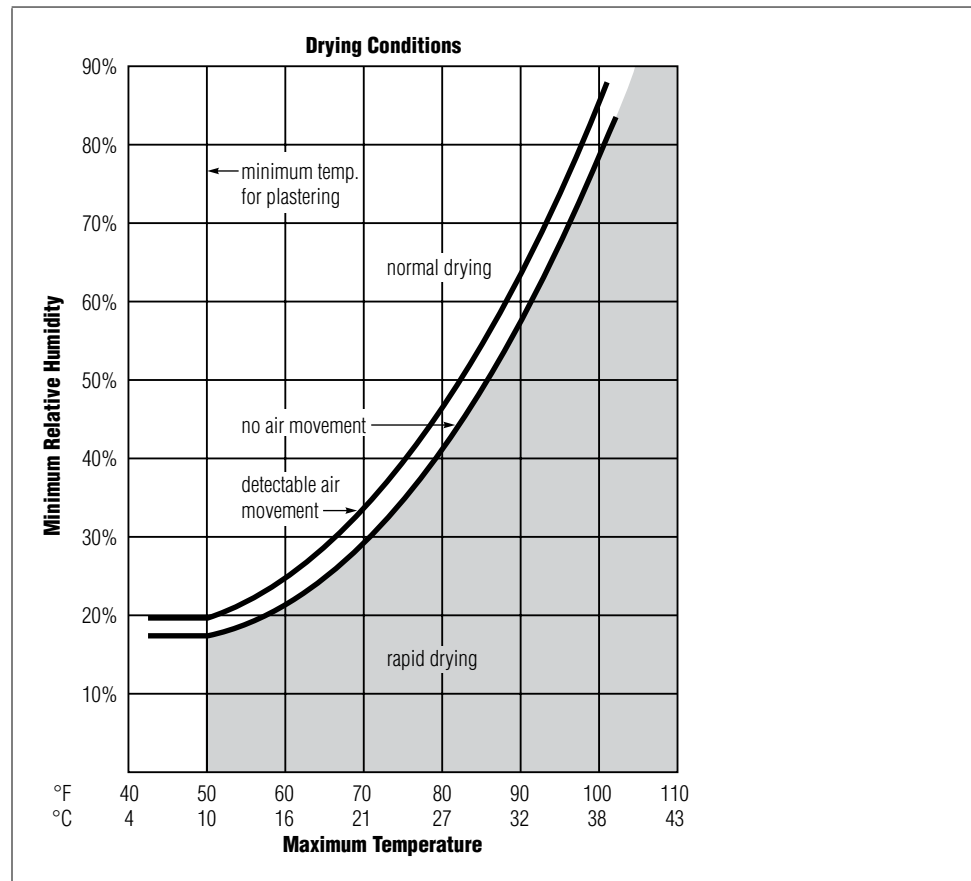
Attach Type S tape with a spring-driven hand stapler using 3/8" (9.5 mm) staples. Place two staples at each end of the tape; staple the remainder at staggered 24" intervals. At wall-ceiling angles, staple tape every 18" to 24" along the ceiling edge only; for wall and partition interior angles, staple every 18" to 24" on one edge only, working from top to bottom. Position the tape to bridge the joint at all interior corners. For fire-rated assemblies, staple either Type P or Type S tape 8" o.c.

Rapid drying conditions SHEETROCK® brand joint tape and SHEETROCK® brand DURABOND® setting-type joint compound or SHEETROCK® brand EASY SAND™ lightweight setting-type joint compound must be used to treat all joints and internal angles when any of the following conditions exist: Building temperature/humidity conditions fall in the "rapid drying" area of the graph on the next page; metal framing is specified; 24" o.c. wood-frame spacing and a single-layer gypsum base veneer system is specified (5/8" base with one-coat veneer finish, or 1/2" or 5/8" base with two-coat veneer finish). Allow joint treatment to set and dry thoroughly before plaster application.

Mix the joint compound in a clean 5-gallon container (plastic is preferred). Use a commercial potato masher or a 1/2" heavy-duty 200- to 300-rpm electric drill with a drywall blade-type mixing paddle. Drill speed must not exceed 400 rpm. Use the amount of water shown on the bag and always sift the powder into the water to ensure complete wetting. Stir vigorously for three minutes; if lumps remain, allow the mix to soak for a minute or two and then restir until smooth. **Note:** Do not contaminate compound with other materials, dirty water or previously mixed batches. Do not retemper batches.

Butter the joints with compound, using a trowel or steel finishing knife to force the compound into the joints. Center SHEETROCK joint tape and press it into the fresh compound, with the trowel held at a 45° angle. Draw the trowel along the joint with sufficient pressure to remove excess compound. After the tape is embedded, apply a skim coat of joint compound to reduce possibility of edge wrinkling or curling. Allow skim coat to set.

Mix and apply a finish coat so that it completely covers the tape, and feather 3" to 4" beyond edges of the tape. Allow to set and dry before plastering. Plaster prefill is not required over setting-type joint compound.



Mixing

Use a cage-type mixing paddle driven by a heavy-duty electric drill producing a minimum speed of 900 to 1,000 rpm (no load). Place approximately 12 to 14 quarts (11 to 13 L) of clean water in a 12- to 15-gallon (45 to 57 L) smooth-sided container, and with the mixer operating, slowly add one bag of plaster. Mix for a minimum of two minutes, but no longer than five minutes, to disperse all lumps completely. Mixing equipment and all tools must be kept clean.

Plastering

Gypsum Base Apply DIAMOND veneer basecoat from 1/16" to 3/32" thickness. Reinforce all joints and interior angles with IMPERIAL Type P or Type S tape. Embed tape and fill beads with DIAMOND veneer basecoat and allow to set but not dry. When the alternate method of joint treatment is used, the paper tape is embedded in DURABOND or EASY SAND setting-type joint compound and then recoated to conceal the paper tape completely. The joint compound is then allowed to set and dry. After beads and joints have been properly prepared, apply a tight, thin coat of DIAMOND veneer basecoat over the entire area, immediately doubling back with plaster from the same batch to full thickness. Fill all voids and imperfections. Leave rough and roughen with a sponge or fine broom once the surface has become somewhat firm. Allow the basecoat to set and partially dry to provide proper suction for finish coat.

Concrete Block Surface must be porous to develop proper suction and rough enough to provide adequate bond. Lightly spray with water to provide uniform suction. Fill and level all voids, depressions and joints with DIAMOND veneer basecoat and allow it to set; then apply subsequent coats as with the gypsum base application above, leaving the final surface rough and open to provide proper bonding of the finish coat.

Monolithic Concrete Prepare the surface with USG plaster bonder applied according to product directions. Fill all voids and depressions with DIAMOND veneer basecoat and allow to set and partially dry. Then apply DIAMOND veneer basecoat as with gypsum base or concrete block (above). **Important:** As no suction is provided over surfaces treated with the plaster bonding agent, it is essential that the applied basecoat surface be raked or broomed once the material has become firm to provide proper suction for the finish coat. Failure to do so may result in delamination of the finish material.

FIBEROCK abuse-resistant panels Veneer plasters provide increased resistance to abrasion, indentation and penetration when used over FIBEROCK abuse-resistant panels in commercial and institutional applications such as schools and high-traffic retail locations. Depending on expectations for abrasion, indentation and impact resistance, the finish plaster may also be IMPERIAL finish, DIAMOND veneer finish, RED TOP finish plaster or any lime-gauging finish combination.

In this two-coat veneer plaster system, DIAMOND veneer basecoat and one of the finishes indicated above are applied over FIBEROCK abuse-resistant panels attached to framing. Space wood or steel framing 16" o.c. or 24" o.c. Position all ends and edges of panels over framing members, except when joints are at right angles to framing members, as in perpendicular application or when end joints are back-blocked. On walls, fasteners are spaced a maximum of 12" o.c. when framing spacing is 24" o.c., or 16" o.c. when framing spacing is 16" o.c. For ceiling applications, nails should be spaced no more than 7" o.c., screws, 12" o.c. Prior to treatment of panel joints, apply USG plaster bonder in a continuous film to joint area according to application directions.

Joints of the panels are treated with SHEETROCK joint tape and DURABOND or EASY SAND setting-type joint compound. Provide an additional coat of setting-type compound to fully conceal the tape. Allow to completely dry. When the joints are completely dry, treat the entire wall surface with USG plaster bonder according to the application directions. Then apply DIAMOND veneer basecoat 1/16" to 3/32" thick using scratch and double-back technique. This is accomplished by applying a tight, thin coat over the entire area, and immediately doubling back with plaster from the same batch to achieve full thickness. When basecoat plaster is firm, broom the surface to leave it rough and open for finish. With basecoat set and partially dry, apply IMPERIAL veneer finish using a scratch and double-back technique. Complete finishing when material is firm. Leave finished surface smooth and dense for decorating.

Note that 5/8" FIBEROCK abuse-resistant panels can be substituted for 5/8" IMPERIAL gypsum base, FIRECODE® Core or 1/2" IMPERIAL gypsum base, FIRECODE® C Core, in any fire-rated design as long as 20-gauge steel framing is used and the above joint treatment procedure is followed.

Durock Cement Board Veneer plasters provide superior abrasion resistance and very good indentation and impact resistance when used over DUROCK cement board in commercial and institutional applications such as schools and high-traffic retail locations. Depending on expectations for abrasion, indentation and impact resistance, the finish plaster may be IMPERIAL finish, DIAMOND veneer finish, RED TOP finish plaster or any lime-gauging finish combination.

In this two-coat veneer plaster system, DIAMOND veneer basecoat and one of the finishes indicated above are applied over DUROCK cement board attached to framing. Space wood or steel framing 16" o.c. Install DUROCK cement panels vertically or horizontally, with the rough side exposed. Fasteners are spaced a maximum of 8" o.c. Prior to treatment of panel joints, apply USG plaster bonder in a continuous film to joint area according to application directions. Joints should then be treated with SHEETROCK joint tape and DURABOND or EASY SAND setting-type joint compound. Joint surfaces must be treated with a separate coat of joint compound to fully conceal the paper tape. When the joint is completely dry, treat the entire wall surface with USG plaster bonder according to application directions. Then apply DIAMOND veneer basecoat from 1/16" to 3/32" thickness using a scratch and double-back technique. This is accomplished by applying a tight, thin coat over the entire area and immediately doubling back with plaster from the same batch to achieve the full thickness. When the basecoat plaster is firm, broom the surface to leave it rough and open for the finish. With the basecoat set and partially dry, apply the finish plaster using a scratch and double-back technique. Complete the finishing when the material is firm. Leave the finished surface smooth and dense for decorating.

Product Data

Material: Gypsum plaster.
Type: Basecoat plaster for standard veneer base layer application.

Approximate Coverage—sq. ft./ton		
Product	Applied over a base of: Gypsum Base or Cement Board	Unit Masonry & Concrete
DIAMOND veneer basecoat	4,000-5,000	3,500-4,500

Compliance with Standards: Complies with ASTM Designation C587.
Warning: Store all IMPERIAL gypsum base, FIBEROCK abuse-resistant panels and DUROCK cement board flat. Panels are heavy and can fall over, causing serious injury or death. Do not move unless authorized.
Storage: Store material in a cool, dry place. Avoid direct sunlight. Maintain temperature above 40 °F (4 °C).
Shelf Life: Up to six months under protected storage conditions. Rotate stock.
Availability and Cost: DIAMOND veneer basecoat is distributed throughout the United States. Contact a United States Gypsum Company sales office or sales person for additional information.
Packaging: DIAMOND veneer basecoat is available in 50 lb. (22.7 kg) bags.

Submittal Approvals:

Job Name	
Contractor	Date

WARNING!
 When mixed with water, this material hardens and becomes very hot—sometimes quickly. DO NOT attempt to make a cast enclosing any part of the body using this material. Failure to follow these instructions can cause severe burns that may require surgical removal of affected tissue or amputation of limb. Long-term breathing of respirable crystalline silica dust can cause permanent lung damage and/or cancer. Dust may cause irritation to eyes, skin, nose, throat and upper respiratory tract. Avoid irritation

by reducing exposure to dust. Use in a well-ventilated area or provide sufficient local ventilation. Wash with soap and water after use. Do not ingest. If dusty, wear a NIOSH/MSHA-approved dust respirator. Wear eye protection. If eye contact occurs, flush thoroughly with water for 15 minutes. If irritation persists, call physician. If ingested, call physician. Product information and MSDS: (800) 507-8899 or www.usg.com.
KEEP OUT OF REACH OF CHILDREN.

Trademarks
 The following trademarks used herein are owned by United States Gypsum or a related company: DIAMOND, DURABOND, DUROCK, EASY SAND, FIBEROCK, FIRECODE, IMPERIAL, RED TOP, SHEETROCK and USG.
Note
 Products described here may not be available in all geographic markets. Consult your U.S. Gypsum Company 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 and industrial hygiene practices during handling and installation of products and systems. Take necessary precautions and wear the appropriate personal protective equipment as needed. Read material safety data sheets and related literature on products before specification and/or installation.

