Gold Bond[®] Veneer Plaster Systems

Technical Information 800.NATIONAL • 800.628.4662

Veneer plaster systems consist of a 4' wide gypsum plastering base with a special, highly absorptive paper surface that is covered with thinly troweled, special purpose plasters.

Three types of veneer plaster systems are available:

1. Gold Bond® Uni-Kal®: a one-coat plaster system.

2. Gold Bond® X-KALibur®: a one-coat, extended set time plaster system.

3. Gold Bond® Kal-Kote®: a two-coat plaster system.

Gold Bond® Kal-Kore® Plaster Base is erected in the same manner for each system. Kal-Kore is a tapered edge gypsum plastering base with a blue absorptive face paper surface designed to permit rapid trowel application and strong bond of Kal-Kote Basecoat, Uni-Kal and X-KALibur one-coat plasters.

DESCRIPTION

Gold Bond® Uni-Kal® Veneer Plaster

Gold Bond[®] Uni-Kal[®] Veneer Plaster is a mill-mixed veneer finish plaster for smooth and textured troweled applications. It consists of specially ground, calcined gypsum, requiring the addition of water. Texturing grade silica sand may be added for textured finish. Complies with ASTM C587.

Use as a one-coat application over gypsum plaster base. A finish coat of Uni-Kal® Veneer Plaster may be used for interior smooth and textured trowel application over a gypsum plaster basecoat or as a one-coat application over gypsum plaster base.

Gold Bond® X-KALibur® Extended Set Veneer Plaster

Gold Bond[®] X-KALibur[®] Extended Set Veneer Plaster is a mill-mixed veneer finish plaster for smooth troweled applications where an extended setting time is desirable. It consists of specially ground, calcined gypsum, requiring the addition of water. Texturing grade silica sand may be added for textured finish. Complies with ASTM C587.

Use as a one-coat application over gypsum plaster base. A finish coat of X-KALibur may be used for interior smooth and textured trowel application over a gypsum plaster basecoat or as a one-coat application over gypsum plaster base.

Gold Bond® Kal-Kote® Basecoat Plaster

Gold Bond® Kal-Kote® Basecoat Plaster is a specially-designed, highstrength basecoat plaster for application 1/16" (1.6 mm) minimum thickness over Kal-Kore® Plaster Base, masonry or monolithic concrete that has been treated with a bonding agent. The strength of Kal-Kote® Basecoat is substantially greater than that exhibited by typical sanded basecoat plaster. Complies with ASTM C587. Veneer Plaster two-coat systems may be specified for virtually all types of partition and ceiling assemblies, including wood or steel framing, or furring and masonry. For both residential and commercial buildings, either type of veneer plaster system produces a surface that is resistant to nail pops.

Kal-Kote Basecoat is a high-strength basecoat plaster for application over Kal-Kore. This system offers four finish options:

Kal-Kote® Smooth, Kal-Kote® Texture, Uni-Kal® and X-KALibur®.

Gold Bond[®] Kal-Kote[®] Smooth Finish Plaster

Gold Bond[®] Kal-Kote[®] Smooth Finish Plaster is a mill-mixed finish plaster for two-coat smooth-troweled applications. It consists of specially ground, calcined gypsum, requiring the addition of water. Complies with ASTM C587.

A finish coat of Kal-Kote[®] Smooth Finish Plaster is intended for interior smooth trowel application over a gypsum plaster basecoat. Apply smooth finish plasters at a thickness of not more than 1/16" (1.6 mm).

Gold Bond® Kal-Kote® Texture Finish Plaster

Gold Bond® Kal-Kote® Texture Finish Plaster is a mill-mixed finish plaster for textured applications. It consists of specially ground, calcined gypsum and aggregate, requiring the addition of water. Complies with ASTM C587.

A finish coat of Kal-Kote® Texture Finish Plaster is intended for interior textured application over a gypsum plaster basecoat in a two-coat system. Apply finish plasters at a thickness of not more than 1/16" (1.6 mm).

INSTALLATION RECOMMENDATIONS

General

Installation of Veneer Plaster should be consistent with methods described in the noted standards and references and as indicated below.

When Uni-Kal or X-KALibur are applied in a thin coat 3/32" thick and troweled to a smooth finish, they provide a durable, abrasionresistant surface for further decoration. They may also be worked to a variety of textured finishes, by adding sand if desired.

Veneer Plasters are formulated to provide a working time of approximately 1 hour. Mix only that quantity of plaster which can be applied and finished within 1 hour.

Set times will be affected by jobsite conditions, such as minerals in the water, cleanliness of the tools and by the addition of various materials used to adjust the working characteristics of the plaster. Gold Bond Building Products only recommends commercial accelerators or retarders manufactured for those specific purposes.

Veneer Plasters are designed for trowel application and are not suitable for conveyance or application by conventional plastering machines.

Job Name		
Contractor	Date	Gold Bond
Submittal Ap	provals: (Stamps or Signatures)	Building Products

TECHNICAL DATA

Physical Properties					
	Uni-Kal Veneer Plaster	X-KALibur Extended Set Veneer Plaster	Kal-Kote Basecoat Veneer Plaster	Kal-Kote Smooth Finish Plaster	Kal-Kote Texture Finish Plaster
Bag Weight	49.5 lb. (22.25 kg)	49.5 lb. (22.25 kg)	49.5 lb. (22.25 kg)	49.5 lb. (22.25 kg)	49.5 lb. (22.25 kg)
Water Ratio	13 – 15 qts./Bag	13 – 15 qts./Bag	6 – 8 qts./Bag	18 – 20 qts./Bag	11 – 12 qts./Bag
PSI	1,400	1,400	2,500	1,000	1,000
Approx. Coverage per Bag	135 – 150 sq. ft. (12 – 14 m²)	135 – 150 sq. ft. (12 – 14 m²)	93 – 106 sq. ft. (8.6 – 9.8 m ²)	145 – 160 sq. ft. (13 – 15 m²)	145 – 160 sq. ft. (13 – 15 m²)
— Applied Thickness	3/32" (2.4 mm)	3/32" (2.4 mm)	1/16" (1.6 mm)	1/16" (1.6 mm)	1/16" (1.6 mm)
One Coat to Level Over Masonry	70 – 80 sq. ft. (6.5 – 7.5 m²)	70 – 80 sq. ft. (6.5 – 7.5 m²)	50 – 63 sq. ft. (4.6 – 5.8 m²)		

Applicable Standards and References

ASTM C587 Standard Specification for Gypsum Veneer Plaster

ASTM C843 Standard Specification for Application of Gypsum Veneer Plaster

ASTM C844 Standard Specification for Application of Gypsum Base to Receive Gypsum Veneer Plaster

Gold Bond Building Products, LLC Manufacturer Standards, NGC Construction Guide

Compared to conventional plasters, Veneer Plaster Systems are more subject to beading (ridging) and cracking at the joints under rapid drying conditions such as those caused by low humidity, high temperature and/or high draft exposure.

A bonding agent must be applied to gypsum board, monolithic concrete, Portland cement plaster and old gypsum plaster surfaces prior to application of veneer plaster systems.

When Uni-Kal or X-KALibur will be applied, do not install Kal-Kore too far in advance of plastering since the board can be adversely affected if face of Kal-Kore has become faded from light. If Kal-Kore has become faded, apply Kal-Kote Basecoat or a bonding agent to obtain good bond.

The use of any gypsum board, face or back surface other than Kal-Kore will adversely affect the bond between plaster and base board.

Veneer Plaster Systems are to be installed with maximum deflection criteria of L/240.

Kal-Kore Plaster Bases must be stored off the ground and under cover. Sufficient risers must be used to assure support for the entire length of the plaster base to prevent sagging.

Treatment of Kal-Kore Joints for Veneer Plaster Systems

Pre-treat all joints and fasteners in Kal-Kote and Uni-Kal Plaster Systems with Kal-Kote Basecoat Plaster, Uni-Kal, X-KALibur or setting compound. Low humidity, high temperatures and rapidly circulating air can cause cracking of plaster and joint beading when Kal-Kore is applied to metal framing. To minimize this during these conditions, joints may be pretreated using paper tape.

Three acceptable methods of treating Kal-Kore joints are:

Drywall Paper Tape Treatment Method

- 1. Trowel Kal-Kote Basecoat Plaster, Uni-Kal or X-KALibur over joint line filling the channel formed by the tapered edges of the Kal-Kore board in an even fashion.
- Center drywall paper tape over the joint line and embed the tape into the soft plaster using a trowel and level the joint. Tape the full length of the joint.
- 3. Allow the treated joints to set prior to general plaster application.

Setting Compound and Paper Tape Treatment Method

- Mix setting compound per instructions on package. Do not contaminate the compound with other materials, dirty water or previous mixes. Do not re-temper.
- Apply the setting compound to the joint by hand or machine tool. The drywall paper tape must be centered over the joint line and embedded into the soft compound. Do not overtrowel to a slick surface. Leave the surface rough to provide mechanical keying of the plaster.
- 3. Allow the treated joints to set and dry prior to general plastering.

Kal-Mesh® Veneer Plaster Tape Treatment Method

Do not use self-adhering mesh.

- 1. Center and secure Kal-Mesh over all joints and interior angles with 1/4" or 5/16" staples.
- 2. Position staples a maximum of 24" apart as follows:

a. Joints: at alternate edges for the run from end to end and directly opposite one another at either end.

b. Angles: along ceiling edge only for wall-to-ceiling angles. Along one edge for wall-to-wall angles.

- After the first staples are placed at the end of a joint or angle, pull unstapled Kal-Mesh as stapling proceeds to assure that it will lie flat against the Kal-Kore.
- 4. Pre-treat all joints and beads with Kal-Kote, Uni-Kal or X-KALibur Plaster. Tightly trowel over joint line in both directions to prevent voids, feathering to a maximum width of about 6".
- 5. Allow the treated joints to set prior to general plaster application.



Application of Veneer Plaster over Kal-Kore Plaster Base

Kal-Kote Application Over Kal-Kore

Basecoat Over Kal-Kore

- Tightly scratch material into previously treated joints and cornerbeads, then immediately scratch-in tightly over the wall and/or ceiling area.
- 2. Double back over the area just troweled with material from the same batch, bringing total thickness up to 1/16" minimum.
- 3. When plaster has "taken up," eliminate excessive trowel marks and fill all surface voids and imperfections to obtain a reasonably uniform surface. Do not over-trowel to a slick surface. Roughen the unset basecoat plaster surface with a serrated darby or lightly wire rake to provide mechanical keying for the finish plaster when necessary.

Smooth Finish Over Basecoat

- Apply only over properly prepared Kal-Kote basecoat. Scratch-in tightly, then double back with material from the same batch immediately to create a uniform coat not exceeding 1/16" in average thickness.
- 2. Remove trowel marks, "cat faces" and other major surface imperfections by "drawing up" or "laying down" the surface with light trowel pressure when plaster has stiffened. Use water sparingly if needed, but do not overtrowel or over-water because this aggravates any normal tendency for blistering when working over such low suction bases. Such blistering will be eliminated by the final water-troweling operations.
- Water-trowel to densify and polish the surface to the desired degree when plaster has set, eliminating any blistering if present. Never use a felt "blister brush" as a substitute for water-troweling.
- 4. Uni-Kal and X-KALibur Plaster may be substituted for Kal-Kote Smooth Finish.

Texture Finish Over Basecoat

- 1. Apply only over properly prepared Kal-Kote basecoat. Scratch-in tightly, then double back with material from the same batch immediately to create a uniform coat not exceeding 1/16" in average thickness.
- 2. When plaster has stiffened, float its surface to any desired finish. Do not float the soft surface of plaster which has already set.
- 3. Up to equal parts of clean, graded silica sand may be added to Uni-Kal and X-KALibur to aid texturing.

Uni-Kal or X-KALibur Application over Kal-Kore

- Tightly scratch material into previously treated joints and cornerbeads, then immediately scratch-in tightly over the wall and/ or ceiling area.
- 2. Double back over the area just troweled with material from the same batch, bringing total thickness up to 3/32" maximum.
- Begin finish troweling at time of initial set, using water sparingly. Final troweling must be accomplished before complete set takes place, as evidenced by darkening of the surface.

Types

Two-Component Systems

Kal-Kore and Kal-Kore® Fire-Shield® Plaster Base: Tapered-edge gypsum plastering base.

Kal-Kote Basecoat: A high-strength basecoat plaster for application 1/16" minimum thickness over Kal-Kore, masonry or monolithic concrete that has been treated with a bonding agent.

Kal-Kote Smooth Finish: A white, smooth trowel finish applied using conventional plastering techniques and suited for further decoration, such as painting or papering. Uni-Kal or X-KALibur Plaster may be used as an alternative.

Kal-Kote Texture Finish: Provides a variety of decorative textured surfaces. Contains graded silica sand.

One-Component Systems

Kal-Kore and Kal-Kore Fire-Shield: Tapered-edge gypsum plastering base.

Uni-Kal Plaster: Designed for trowel application using common plastering techniques. Uni-Kal is a specially designed single-component veneer plaster for application over tapered edge 1/2" regular or 5/8" Kal-Kore Fire-Shield. The strength of Uni-Kal is less than a two-component system, but provides a surface resistant to abrasion, cracking and nailpops.

X-KALibur Plaster: X-KALibur may be used as an alternative to Uni-Kal for trowel applications when extended working time is desired. X-KALibur is a single component veneer plaster for application over tapered edge 1/2" regular or 5/8" Kal-Kore Fire-Shield. The strength of X-KALibur is less than a two-component system, but provides a surface resistant to abrasion, cracking and nail-pops.

Kal-Kote Smooth Finish, Kal-Kote Texture Finish, Uni-Kal and X-KALibur may be used as a finish coat over conventional plaster base coats of Gypsolite® Plaster and Two-Way Hardwall Plaster as manufactured by Gold Bond Building Products, LLC.

Fire Resistance

Kal-Kote Basecoat & Finishes: Fire ratings equivalent to those of drywall systems can be obtained by applying the corresponding Kal-Kore type and thickness over the same framing member size and spacing, with the same fasteners and 1/8" of Kal-Kote plasters.

Uni-Kal: Fire ratings equivalent to those of drywall systems can be obtained by applying the corresponding Kal-Kore type and thickness over the same framing member size and spacing with the same fasteners and 3/32" of Uni-Kal.

X-KALibur: Fire ratings equivalent to those of drywall systems can be obtained by applying the corresponding Kal-Kore type and thickness over the same framing member size and spacing with the same fasteners and 3/32" of X-KALibur.



DECORATION

Jobsite conditions of temperature and humidity, mineral content of water and variances in aggregates often cause shading discoloration of the plaster. Therefore, the veneer plaster should not be considered a finished product. Plaster should be painted or decorated in some other manner. Consult paint manufacturers as to compatible products. Gold Bond Building Products recommends alkali-resistant primers formulated for use over new plaster.

Painting Plaster

Various job conditions, such as suction differences, wet or only partially dry walls and reactions between paint and lime, may cause unsatisfactory paint finishes, particularly on new construction.

Alkali-resistant primers specifically formulated for use over new plaster will permit decorating with oil- or latex-type paints. Use quality paint products and follow paint manufacturer's recommendations. Finished plaster should be painted or covered to conceal possible discoloration. The paint system should be suitable for use over plaster surfaces that contain lime, which has a high pH of 10–13.

It is essential that plaster be sound and completely dry before painting. Under good drying conditions, you may paint veneer plaster 48 hours after application.

High build, heavy duty and special purpose coatings, such as epoxy, are not recommended over veneer or job-gauged lime putty finishes.

In all cases, the paint manufacturer should be consulted and approve paint system suitability for use with gypsum/lime finish plaster.

FOR MORE INFORMATION

Architectural Specifications

Gold Bond Building Products CSI MasterFormat® 3-part guide specifications are downloadable as editable Microsoft[®] Word documents at: goldbondbuilding.com.

Latest Technical Information and Update

Visit **goldbondbuilding.com** or call National Gypsum Company Construction Services: 1-800-NATIONAL (628-4662).



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