

VENEER PLASTER & HI-ABUSE BRAND VENEER PLASTER SYSTEMS

MANUFACTURER

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DESCRIPTION

Veneer Plaster Systems are integrated systems consisting of a 4'-wide gypsum plastering base called Kal-Kore with a special, highly absorptive paper surface that is covered with thinly troweled, special purpose plasters.

Three types of Veneer Plaster Systems are available:

Uni-Kal BRAND: a one-coat plaster system.

X-KALibur BRAND: a one-coat, extended set time plaster system.

Kal-Kote BRAND: a two-coat plaster system.

Kal-Kore BRAND 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 Base Plaster, Uni-Kal, and X-KALibur one-coat plasters. Also available foil backed, Fire-Shield (type X) and Hi-Abuse Fire-Shield.

Hi-Abuse Kal-Kore Fire-Shield Type X plaster base panels consist of a fire resistive type X gypsum core encased in a blue absorptive face paper designed to permit rapid trowel application of veneer plaster systems and strong liner paper on the back side.

BASIC USE

Veneer Plaster Systems may be specified for virtually all types of partition and ceiling constructions, including wood or steel framing, or furring and masonry. For both residential and commercial buildings, either type of veneer plaster system produces a wall more nail-pop-resistant than conventional lath and plaster.

Hi-Abuse plaster baseboard is designed for use in wall assemblies in areas where abuse resistance is a major concern.

ADVANTAGES

- Rapid installation reduces overall construction time.
- Appearance and surface of conventional plaster at lower cost than regular plastering.
- High resistance to cracking, nail-popping, impact and abrasion failure.
- Veneer Plaster Systems provide an excellent base over which paints or other finishes should be applied.
- Mill-mixed plaster components help assure uniform installation performance and quality.

- The gypsum core will not support combustion or transmit temperatures greatly in excess of 212°F (100°C) until completely calcined, a slow process.
- Expansion and contraction under normal atmospheric changes are negligible.

One-Coat Systems: Uni-Kal and X-KALibur

- Requires only one plastering material on the job.
- Slightly lower in-place cost than two-coat system.
- Can be applied directly to concrete block.

Two-Coat System: Kal-Kote

- Kal-Kote System may be used for plaster-embedded electric radiant heating cable systems.

- Same application techniques as for conventional plaster.
- Greater crack resistance than one-coat systems.
- Can be applied directly to concrete block.

LIMITATIONS

- Not recommended for exterior use.
- Plaster must be kept dry until used. It must be stored off the ground, under cover and away from moisture sources.
- Not to be used in interior areas where directly exposed to free water or severe moisture conditions.
- Not to be used in areas subjected to temperatures exceeding 125°F (52°C) for extended periods.

(Continued next page)

SIZES

KAL-KORE GYPSUM WALLBOARD

Size	Thickness	Edge	Pieces Per Bdl.
4'x8' through 16' (1219) mm x 2438-4877 mm)	3/8" (9.5 mm)	Tapered	2
4'x8' through 16' (1219) mm x 2438-4877 mm)	1/2" (12.7 mm) 1/2" FSK-C (12.7 mm)	Tapered	2
4'x8' through 16' (1219) mm x 2438-4877 mm)	5/8" FSK (15.9 mm) 5/8" FSK-C (15.9 mm)	Tapered	2
4'x8' through 12' (1219) mm x 2438-3658 mm)	5/8" FSK Hi-Abuse (15.9 mm)	Tapered	2

Job Name _____

Contractor _____ Date _____

Submittal Approvals: (Stamps or Signatures)

PRODUCT	BAG WEIGHT	COVERAGE
KAL-KOTE BASECOAT PLASTER	80 lbs. (36 kg.)	(est.) 1/16" (1.6 mm) on Kal-Kore Base, 150-170 sq. ft. (1.2-1.4 M ²) per bag. One coat to level over masonry, 80-100 sq. ft. (0.65-0.80 M ²) per bag.
KAL-KOTE SMOOTH FINISH	50 lbs. (22.5 kg.)	(est.) 1/16" (1.6 mm) coat troweled on Kal-Kote Basecoat Plaster, 145-160 sq. ft. (1.17-1.30 M ²) per bag.
KAL-KOTE TEXTURE FINISH	50 lbs. (22.5 kg.)	(est.) 1/16" (1.6 mm) coat troweled on Kal-Kote Basecoat Plaster, 145-160 sq. ft. (1.17-1.30 M ²) per bag.
UNI-KAL	50 lbs. (22.5 kg.)	(est.) 3/32" (2.4 mm) on Kal-Kore Base, 135-150 sq. ft. (1.09-1.2 M ²) per bag. One coat to level over masonry, 70-80 sq. ft. (0.57-0.65 M ²) per bag.
X-KALibur	50 lbs. (22.5 kg.)	(est.) 3/32" (2.4 mm) on Kal-Kore Base, 135-150 sq. ft. (1.09-1.2 M ²) per bag. One coat to level over masonry, 70-80 sq. ft. (0.57-0.65 M ²) per bag.

FASTENERS FOR ATTACHING KAL-KORE

Framing	Kal-Kore	Fastener	Fastener Spacing
Screw Studs & Furring	1/2" (12.7 mm)	Type S Screws 1" (25.4 mm) for single layer	12" o.c. Max. (305 mm)
	5/8" (15.9 mm)	1-5/8" (41.3 mm) for two-ply	
Wood Framing	3/8" (9.5 mm)	1-1/4" (31.8 mm) annular or 4d box nails*	Ceiling 7" o.c. (178 mm) Max.
	1/2" (12.7 mm)	1-1/4" (31.8 mm) annular or 5d box nails*	Sidewalls 8" o.c. (203 mm) Max.
	5/8" (15.9 mm)	1-3/8" (34.9 mm) annular or 6d box nails*	

*Alternate: On walls, 1-1/4" (31.8 mm) Type W screws are spaced 12" (305 mm) when framing is 24" o.c. (610 mm), 16" (406 mm) when framing is 16" o.c. (406 mm).

SPACING OF FRAMING OR FURRING

Type of framing or furring	Kal-Kore Thickness	Max. spacing c to c
Wood	3/8" (9.5 mm)	*16" (406 mm)
	1/2" (12.7 mm)	**24" (610 mm)
	5/8" (15.9 mm)	24" (610 mm)
***Metal	3/8" (9.5 mm)	N.A.
	1/2" (12.7 mm)	16" (406 mm)
	5/8" (15.9 mm)	24" (610 mm)

N.A. – Not Approved.

* Bound edge of Kal-Kore must be at right angles to framing for ceiling or walls.

** Bound edge of Kal-Kore must be at right angles to joists, 16" (406 mm) maximum spacing for bound edge of Kal-Kore parallel to joists.

*** On ceilings, screw furring channel [7/8" (22.2 mm) depth] shall span 48" (1219 mm) maximum. Resilient furring channel [1/2" (12.7 mm) depth] shall span 24" (610 mm) maximum. For greater spans, 1-5/8" (41.3 mm) Screw Studs may be used as Ceiling Furring Channels provided they are secured with flanges up (open side up) at spans not to exceed: 6' (1829 mm) at 12" o.c. (305 mm) spacing, 5'6" (1676 mm) at 16" o.c. (406 mm) spacing and 5' (1524 mm) at 24" o.c. (610 mm) spacing.

SURFACE BURNING CHARACTERISTICS

ASTM E 84
Flame spread (Face): 15
Flame spread (Back): 50 or less

INSTALLATION

APPLICABLE STANDARDS AND REFERENCES

ASTM C 843
ASTM C 844
National Gypsum Co. *Gypsum Construction Guide*

RECOMMENDATIONS

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, abrasion-resistant 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 job site 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. National Gypsum 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.

- 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 monolithic concrete, to portland cement plaster and to 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 or Hi-Abuse Kal-Kore too far in advance of plastering since the bond can be adversely affected if face of Kal-Kore or Hi-Abuse Kal-Kore has become faded from light. If Kal-Kore or Hi-Abuse Kal-Kore has become faded, apply Kal-Kote Base Plaster 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.

- Framing spacing is limited and partition heights are reduced in comparison with some standard constructions.

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

- Hi-Abuse Kal-Kore Fire-Shield framing spacing should not exceed 16" o.c. to provide impact resistance as cited.

- Hi-Abuse Kal-Kore and 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.

COMPOSITION AND MATERIALS

Gypsum veneer plasters are mill mixed with lime, except Kal-Kote Base, requiring only the addition of water to make them ready for use. Texture Finish contains graded silica sand.

Kal-Kore and Kal-Kore Fire-Shield are manufactured panels with a gypsum core encased in special absorptive paper. Available in regular or type X cores.

Neither plasters nor base board contain asbestos.

Hi-Abuse Kal-Kore Fire-Shield is a manufactured panel with a gypsum core encased in special absorptive paper. Available in type X core only.

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TYPES

Two-Component Systems

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

Kal-Kote Basecoat Plaster: 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, Kal-Kore Fire-Shield and Hi-Abuse 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 nail-pops.

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 and Two-Way Hardwall as manufactured by National Gypsum Company.

ACCESSORIES

Kal-Mesh: A coated fiberglass tape which can be stapled to Kal-Kore to reinforce all joints and interior angles.

Kal-Korner Bead: A special galvanized bead with a 1/8" ground and 1-1/4" flanges used to reinforce exterior corners.

Expanded Veneer Cornerbead: Used as an alternative to the Kal-Korner Bead for exterior corners. Galvanized steel with 1-1/8" flanges.

Veneer L Trim Casing Bead: Used as a finished edge at door and window jambs; galvanized steel.

Veneer J Trim Casing Bead: Used as a finished edge at door and window jambs by slipping over edge of plaster base; galvanized steel.

E-Z Strip Control Joint: An extruded vinyl control joint to relieve stresses in Veneer Plaster Systems.

.093 Zinc Control Joint: All zinc control joint designed to relieve stresses in Veneer Plaster Systems.

APPLICABLE STANDARDS

Kal-Kore is manufactured to conform to ASTM Specification C 1396 and CSA A82.27.

Kal-Kore	ASTM C 1396
Hi-Abuse Kal-Kore Fire-Shield Plaster Base	ASTM C 1396
Kal-Kote Base Plaster	ASTM C 587
Uni-Kal Plaster	ASTM C 587
X-KALibur Plaster	ASTM C 587
Kal-Kote Smooth	ASTM C 587
Kal-Kote Texture	ASTM C 587
Kal-Korner Bead	ASTM C 1047
Expanded Veneer Corner Bead	ASTM C 1047
Veneer L Trim Casing	ASTM C 1047
Veneer J Trim Casing	ASTM C 1047
E-Z Strip Expansion Joint	ASTM C 1047
.093 Zinc Expansion Joint	ASTM C 1047

TECHNICAL DATA

FIRE RESISTANCE

Kal-Kote: 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.

1 Hour Rating: 5/8" Hi-Abuse Kal-Kore Fire-Shield Type X plaster base screw attached vertically to both sides of 20 gauge 3-5/8" studs spaced 16" o.c. with 1-1/4" long, type S screws spaced 8" o.c. along edges and 12" o.c. in the field of the board. Plaster base joints staggered.

Kal-Kote Smooth Finish: Requires the addition of water only. It may also be used as a finish for conventional base coat plasters. Small amounts of commercial retarder may be cautiously used to slow the setting time when used over conventional basecoat plasters. Kal-Kote Smooth Finish is not designed to be applied directly to Kal-Kore Wallboard.

Kal-Kote Texture Finish: Applies as a finish coat over Kal-Kote Base. It requires the addition of water only. Kal-Kote Texture Finish is not designed to be applied directly to Kal-Kore Wallboard.

DECORATION

Job site conditions of temperature and humidity, mineral content of water and variances in aggregates often cause shading discolorations in the plaster. Therefore, the veneer plaster should not be considered a finished product. Plaster should be painted or decorated in some other manner. Paint manufacturers should be consulted as to compatible products. National Gypsum recommends alkali-resistant primers formulated for use over new plaster.

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

National 
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Excellence Across The Board 