Kal-Kore BRAND Plaster Base

**DESCRIPTION**
Kal-Kore BRAND Plaster Base panels consist of a fire resistive gypsum core encased in blue absorptive face paper and liner paper on the back side. Although specifically designed as a base for veneer plaster, it also provides an excellent base for conventional basecoat plasters such as Gypsolite or Two-Way Hardwall.

**TECHNICAL DATA**

**KAL-KORE PLASTER BASE**
Kal-Kore is available in two basic types: Regular and Fire-Shield type X. Kal-Kore is 4' wide and is supplied in 8' through 16' lengths. Thicknesses are as follows:
- Regular – 3/8" and 1/2".
- Fire-Shield – 1/2" Fire-Shield C, 5/8" Fire-Shield, 5/8" Fire-Shield C, produced to meet ASTM C 1396.

Note: Installation of gypsum lath and metal lath shall be in accordance with ASTM C 841. Do not use 3/8" Kal-Kore plaster base with conventional basecoat plasters.

Metal Lath*

**DIAMOND MESH LATH**
Used as a plaster base and reinforcement on almost all types of walls and ceilings, over wood or steel framing, flat or curved surfaces. Diamonds are 5/16" wide.

**SELF-FURRING DIAMOND MESH LATH**
Used extensively in stucco work, as a plaster reinforcement over interior masonry walls, and in steel column fireproofing. The self-furring dimples hold the metal lath 1/4" away from the surface to be plastered.

**1/8" FLAT RIB LATH**
Designed to meet the demand for rigid expanded metal lath used as a plaster base in all types of work. Widely used as reinforcement for basecoat in ceramic tile work. Sheets are reversible.

**3/8" RIB LATH**
The 3/8" rib lath is used for ceilings under steel joist construction and metal reinforced concrete floors. It is also recommended for concrete slab floors over steel joists.

Conventional Plaster Accessories*

**NO. 15 DOUBLE V EXPANSION JOINT**
Minimizes cracking in large plaster areas. Also provides ground to ensure proper plaster thickness.

**NO. 66 EXPANDED FLANGE SQUARE CASING**
Has short, 90 degree return at plaster surface, serving as a plastering stop.

**NO. 1 EXPANDED CORNERBEAD**
The 2 1/2" expanded flange ends 1/4" from the nose of the bead providing reinforcement where needed most.

**COLD ROLLED STEEL CHANNEL**
Used as studs for attaching metal lath in 2" solid partitions. For furring or runners in suspended ceilings.

**BEAM FURRING CLIP**
Used to attach lath to flanges of steel beams, joists and columns. Tempered spring steel.

**L RUNNER**
Perforated – Ceiling or floor support for 2" solid lath and plaster partition.
Plain – Ceiling support for 2" solid board partition using 1" shaftliner.

*Metal products are not manufactured by National Gypsum Company.
DESCRIPTION

GOLD BOND BRAND TWO-WAY HARDWALL GYPSUM PLASTER

Gold Bond Brand Two-Way Hardwall Plaster is a basecoat plaster which requires the job site addition of an aggregate and water to provide working qualities and is designed for interior use over all accepted plaster bases. It may be applied by hand or used through pump/spray plastering machines.

ADVANTAGES

Controlled Uniformity

Two-Way Hardwall Plaster is set-stabilized and adjusted for market requirements and seasonal changes. When mixed with sand or other aggregate it has uniform working qualities and excellent spread.

TECHNICAL DATA

AGGREGATE PROPORTION AND ESTIMATED COVERAGE

<table>
<thead>
<tr>
<th>Aggregate Proportions</th>
<th>Plaster Base</th>
<th>Coverage, Sq. Yds. per Ton/Metric Ton</th>
<th>Sq. Ft. per Bag</th>
<th>Thickness In. (mm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sanded 1:2-1/2</td>
<td>Gypsum Lath</td>
<td>175-220 (161-203)</td>
<td>80-100</td>
<td>7/16&quot; (11.1)</td>
</tr>
<tr>
<td>Sanded 1:2-1/2</td>
<td>Metal Lath</td>
<td>90-125 (83-115)</td>
<td>40-55</td>
<td>9/16&quot; (14.3)*</td>
</tr>
<tr>
<td>Sanded 1:3</td>
<td>Brick &amp; Clay Tile</td>
<td>175-220 (161-203)</td>
<td>80-100</td>
<td>9/16&quot; (14.3)</td>
</tr>
<tr>
<td>Sanded 1:3</td>
<td>Concrete Block</td>
<td>175-220 (161-203)</td>
<td>80-100</td>
<td>9/16&quot; (14.3)</td>
</tr>
</tbody>
</table>

*Measured from face of lath.

NOTE: Sanded 1:2-1/2 means 1 part plaster to 2-1/2 parts sand by weight.

WEIGHT COMPARISON OF BASECOAT PLASTERS

<table>
<thead>
<tr>
<th>Dry Set Mortar Weight</th>
<th>Sanded 1:3</th>
<th>Gypsum Plaster Regular</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lbs./yd.³(ks/m³)</td>
<td>3/8&quot;(9.5 mm) thick</td>
<td>34 (18)</td>
</tr>
<tr>
<td>Lbs./yd.³(ks/m³)</td>
<td>1/2&quot;(12.7 mm) thick</td>
<td>45 (24)</td>
</tr>
<tr>
<td>Lbs./yd.³(ks/m³)</td>
<td>5/8&quot;(15.9 mm) thick</td>
<td>56 (30)</td>
</tr>
<tr>
<td>Lbs./yd.³(ks/m³)</td>
<td>3/4&quot;(19.0 mm) thick</td>
<td>67 (36)</td>
</tr>
</tbody>
</table>

Lbs./yd.²(ks/m²) 3/8"(9.5 mm) thick | 34 (18) | 14 (8) |
| Lbs./yd.²(ks/m²) 1/2"(12.7 mm) thick | 45 (24) | 19 (10) |
| Lbs./yd.²(ks/m²) 5/8"(15.9 mm) thick | 56 (30) | 24 (13) |
| Lbs./yd.²(ks/m²) 3/4"(19.0 mm) thick | 67 (36) | 29 (16) |

Wet Mortar Weight

Weight lbs. per cu. ft. (kg/m³) 140 (2243) 69 (1105)

GOLD BOND BRAND GYPSOLITE PLASTER

Gold Bond Brand Gypsolite is a lightweight gypsum basecoat plaster mixed at the mill with correctly sized and proportioned perlite aggregate, requiring only the addition of water on the job. It is manufactured to be trowel-applied over gypsum or metal lath.

ADVANTAGES

Uniform Strength and Hardness

Uniformity is ensured through exact proportioning and thorough mixing of graded perlite and gypsum plaster at the mill. Gypsolite provides a uniform base for the finish coat.

Lightweight

Gypsolite weighs less than half as much as sanded gypsum plaster, thus reducing the dead-load on framing.

High Insulating Value

Gypsolite has a "k" factor of 1.5 which provides about 3 1/2 times the insulating value of sanded plaster.

LIMITATIONS

When used over metal lath, a sand float finish should be specified. A smooth-trowel finish is not recommended since the combination of a relatively soft (perlite aggregated) basecoat and a hard (smooth-trowel lime/gauging) finish has the potential for cracking and spalling of the finish coat.

Fire Resistance

Gypsolite has excellent fire-resistant qualities and generally provides fire ratings higher than sanded plaster.

Specification Reference

ASTM Designation C 28 for “Gypsum Plasters”.

Bag Weight

80 lbs. (36.3 kg)

25 lbs. (11 kg)

Water Ratio

1.2 gallons of water per 25 lbs. of plaster.

TECHNICAL DATA

GYPSOLITE ESTIMATED COVERAGE

<table>
<thead>
<tr>
<th>Plaster Base</th>
<th>Coverage, Sq. Yds. per Ton/Metric Ton</th>
<th>Sq. Ft. per Bag</th>
<th>Thickness In. (mm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gypsum Lath</td>
<td>140-155 (129-143)</td>
<td>50-55</td>
<td>7/16&quot; (11.1)</td>
</tr>
<tr>
<td>Metal Lath</td>
<td>65-80 (60-74)</td>
<td>25-50</td>
<td>9/16&quot; (14.3)*</td>
</tr>
</tbody>
</table>

*Measured from face of lath.
PHYSICAL PROPERTIES OF BASECOAT PLASTERS (TYPICAL TEST RESULTS PER ASTM C 472)

<table>
<thead>
<tr>
<th>Plaster Properties</th>
<th>Gypsolite Regular</th>
<th>Gypsum Plaster to Sand by Weight</th>
<th>Gypsum Plaster to Vermiculite</th>
<th>Gypsum Plaster and Perlite</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mix</td>
<td>Mill Mix</td>
<td>1:1</td>
<td>1:2</td>
<td>1:3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2 cu. ft. (.06 m³)</td>
<td>3 cu. ft. (.08 m³)</td>
<td></td>
</tr>
<tr>
<td>Mix</td>
<td></td>
<td>100 lbs. (45.4 kg)</td>
<td>300 lbs. (136 kg)</td>
<td></td>
</tr>
<tr>
<td>Mix</td>
<td></td>
<td>2 cu. ft. (.06 m³)</td>
<td>(2067)</td>
<td></td>
</tr>
<tr>
<td>Approximate Compressive Strength lbs. per sq. in. (kPa)</td>
<td>1600</td>
<td>1500</td>
<td>750</td>
<td>130</td>
</tr>
<tr>
<td>Approximate Tensile Strength lbs. per sq. in. (kPa)</td>
<td>250</td>
<td>190</td>
<td>120</td>
<td>130</td>
</tr>
</tbody>
</table>

**Gold Bond Brand Gauging Plaster**, quick set or slow set type, is designed for use with finish lime. It is specially ground, calcined gypsum, which readily mixes with water and lime putty. Proper proportioning is essential, since gauging adds strength and hardness to the finish surface by reinforcing the plastic non-setting lime against shrinkage and cracking. A finish coat of gypsum gauging plaster and finish lime, job mixed 2 parts hydrated lime to 1 part plaster by weight, is designed primarily for interior smooth trowel application over a gypsum plaster basecoat. Smooth finish plasters should be applied at a thickness of not more than 1/16". Texture finishes should be applied at a thickness of not more than 1/8".

Complies with ASTM Designation C 28.

**Bag Weight**
- Quick Set – 100 lbs. (45.4 kg) (50 lb. (22.7 kg) bags available in limited areas)
- Slow Set – 100 lbs. (45.4 kg) (50 lb. (22.7 kg) bags available in limited areas)

**Gyspum Moulding Plaster**
Gold Bond Brand Moulding Plaster is a very white, finely ground gypsum, primarily used for all kinds of ornamental plaster work. Because of its low expansion, excellent strength and hardness, it is specially adaptable for casting in rubber, gelatin and other types of moulds. For casting purposes, only water is added. For run-in-place ornamental work, such as cornices, the moulding plaster is used with lime putty, mixed 2 parts lime to 1 part moulding plaster by weight.

Complies with ASTM Designation C 59.

**Bag Weight**
- 100 lbs. (45.4 kg) (50 lbs. (22.7 kg) available in limited areas)

**Note**: Application of plaster shall be in accordance with ASTM C 842.

**Water Ratio**
- 6.5 gallons of water per 100 lb. bag.

**Mill-Mixed Finish Plasters**
For a mill-mixed finish plaster, use Kal-Kote Smooth Finish, Kal-Kote Texture Finish Plaster, Uni-Kal or X-KALibur Extended Set Veneer Plaster. Requires the addition of water only. See page 46.

**Gyspum Gauging Plaster**
Method of Application | Coverage*  
--- | ---  
Trowel Finish | 1000-1400 sq. yds./Ton (921-1290 m²/Metric Ton)  
| 225-315 sq. ft./bag (21-29 m²/Bag)  
*With the addition of two tons of hydrated lime.

**Mill-Mixed Finish Plasters**

**Gyspum Moulding Plaster**
Method of Application | Coverage*  
--- | ---  
Trowel Finish | 1000-1400 sq. yds./Ton (921-1290 m²/Metric Ton)  
| 225-315 sq. ft./bag (21-29 m²/Bag)  
*With the addition of two tons of hydrated lime.

**Painting Plaster**
Various job conditions such as suction differences, wet or only partially dry walls, and reactions between paint and lime have caused 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.

Quality paint products should be used and manufacturers' recommendations followed. 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. Conventional plaster may require 30 to 60 days to fully dry.
Gypsum Plaster Base/Wood Framing

**DESCRIPTION**

ATTACHMENT OF GYPSUM PLASTER BASE TO HORIZONTAL AND VERTICAL WOOD SUPPORTS

Note: Application of Gypsum Plaster Base shall be in accordance with ASTM C 841.

Apply all Gypsum Plaster Base with long dimensions at right angles to the wood studs or supports. End joints shall occur on different supports in different courses and shall not be nearer than one full stud space from edges of openings in walls or partitions.

**TECHNICAL DATA**

### MAXIMUM SPACING OF PLASTER BASE

<table>
<thead>
<tr>
<th>Thickness of Plaster Base</th>
<th>Distance Between Supports</th>
<th>Number of Attachments per Bearing</th>
<th>Approximate Spacing c to c of Attachments</th>
</tr>
</thead>
<tbody>
<tr>
<td>3/8” (9.5 mm)</td>
<td>16” (406 mm)</td>
<td>4</td>
<td>5” (127 mm)</td>
</tr>
<tr>
<td>1/2” (12.7 mm)</td>
<td>24” (609 mm)</td>
<td>4</td>
<td>5” (127 mm)</td>
</tr>
</tbody>
</table>

### NAILS AND STAPLES* MINIMUM GAUGE REQUIREMENTS

<table>
<thead>
<tr>
<th>Attachments of Plaster Base</th>
<th>Thickness</th>
<th>Length of Leg</th>
<th>Depth of Support</th>
<th>Diameter of Flat Head or Blued Nails or Crown Shank of Nails or Staples*</th>
<th>Gauge of Width of Staples</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nails</td>
<td>3/8” (9.5 mm)</td>
<td>1 1/8” (28.6 mm)</td>
<td>3/4” (19.0 mm)</td>
<td>19/64” (7.5 mm)</td>
<td>13</td>
</tr>
<tr>
<td>Staples*</td>
<td>1” (25.4 mm)</td>
<td>5/8” (15.9 mm)</td>
<td></td>
<td>7/16” (11.1 mm)</td>
<td>16</td>
</tr>
<tr>
<td>Nails</td>
<td>1/2” (12.7 mm)</td>
<td>1 1/4” (31.8 mm)</td>
<td>3/4” (19.0 mm)</td>
<td>19/64” (7.5 mm)</td>
<td>13</td>
</tr>
<tr>
<td>Staples*</td>
<td>1 1/8” (28.6 mm)</td>
<td>5/8” (15.9 mm)</td>
<td></td>
<td>7/16” (11.1 mm)</td>
<td>16</td>
</tr>
</tbody>
</table>

*Galvanized staples.

---

2” Solid-Metal Lath Channel Stud System

**DESCRIPTION**

This partition with C.R. channel as studs gives fire protection, stability and sound insulation while occupying a minimum amount of floor and building space. The system consists of three metal units (channel stud, metal lath, L runners) which are used together with Diamond Metal Lath and Gypsum Plaster. These components form a space-saving, strong, non-load-bearing partition for use in interior wall construction.

### ADVANTAGES

- **Space Saving**
  Occupies less than half the space of conventional wood-stud or masonry constructed partitions.

- **Cost Saving**
  Simple erection cuts labor costs. One mechanic can quickly erect the channel studs and tie on Diamond Mesh Metal Lath.

- **Fire Protection**
  Composed of gypsum plaster and steel, it makes an excellent fire barrier. Official tests give the partition a one- to two-hour fire rating.

- **Sound Insulation**
  Partition is an effective sound barrier and has a Sound Transmission Class of 37 for 2” thick with sand, 33 for 2 1/2” thick with perlite aggregate.

### LIMITATIONS

Refer to table of Permissible Partition Heights on page 38.

---

**Strength**

The completed partition is a monolithic slab of gypsum plaster thoroughly reinforced with expanded metal lath and securely anchored to floor and ceiling. It is highly resistant to tension, impact, shear and vibration.

**Adaptability**

Partitions will accommodate door bucks of various types, casings, switch boxes and electrical outlets; also support lightweight fixtures such as kitchen cabinets.

---

**LIMITATIONS**

Refer to table of Permissible Partition Heights on page 38.
### TECHNICAL DATA

#### SPACING OF VERTICAL SUPPORTS FOR ATTACHMENT

<table>
<thead>
<tr>
<th>Type of Lath</th>
<th>Maximum Spacing of Supports</th>
<th>Weight Lbs. per Sq. Yd. (kg/m²)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diamond</td>
<td>16” (406 mm)</td>
<td>2.5 (0.6 kg)</td>
</tr>
<tr>
<td>Mesh Lath</td>
<td>16” (406 mm)</td>
<td>3.4 (1.9 kg)</td>
</tr>
<tr>
<td>Flat Rib Lath</td>
<td>16” (406 mm)</td>
<td>2.75 (1.5 kg)</td>
</tr>
<tr>
<td></td>
<td>24” (610 mm)</td>
<td>3.4 (1.9 kg)</td>
</tr>
<tr>
<td>3/8” (9.5 mm) Rib Lath</td>
<td>24” (610 mm)</td>
<td>3.4 (1.9 kg)</td>
</tr>
</tbody>
</table>

*This spacing permissible for solid partitions not exceeding 16' (4877 mm) in height.

#### PERMISSIBLE PARTITION HEIGHTS (BASED ON L/240)

<table>
<thead>
<tr>
<th>Maximum Unsupported Height</th>
<th>Face-to-Face Plaster Thickness</th>
<th>Size and Weight of Channels (per 1000') (305 m)</th>
</tr>
</thead>
<tbody>
<tr>
<td>12’ (3658 mm)</td>
<td>2” (51 mm)</td>
<td>3/4” (19.0 mm) 300 lbs. (136 kg)</td>
</tr>
<tr>
<td>14’ (4267 mm)</td>
<td>2 1/4” (57.2 mm)</td>
<td>3/4” (19.0 mm) 300 lbs. (136 kg)</td>
</tr>
<tr>
<td>16’ (4877 mm)</td>
<td>2 1/2” (63.5 mm)</td>
<td>3/4” (19.0 mm) 300 lbs. (136 kg)</td>
</tr>
<tr>
<td>18’ (5486 mm)</td>
<td>2 3/4” (69.9 mm)</td>
<td>1 1/2” (38.1 mm) 475 lbs. (215 kg)</td>
</tr>
</tbody>
</table>

### DETAILS

**INTERSECTING PARTITION**

![Intersecting Partition Diagram](image)

**METAL DOOR FRAME**

![Metal Door Frame Diagram](image)

**CEILING DETAIL**

![Ceiling Detail Diagram](image)

**BASE DETAIL**

![Base Detail Diagram](image)
**DESCRIPTION**

Gypsum plaster, mixed with sand or lightweight aggregate, is applied over a metal lath base providing an economical fire protective covering for structural steel columns.

**ADVANTAGES**

**Lightweight**

This system of fireproofing weighs only half as much as tile and one quarter as much as standard concrete for equivalent fire resistive ratings. This means a reduction of up to 1/3 in dead-load weight, reducing the size and cost of footings, foundations and structural framing.

**Fire Resistance**

Fire resistance ratings up to four hours can be obtained.

**Economy**

Lath is low in cost, quick and easy to apply, thereby effecting savings in material and labor costs.

**LIMITATIONS**

In warehouses or other occupancies where columns might be damaged, angle iron guards are recommended to protect column corners to the necessary height.
Suspended Metal Lath Ceilings

**DESCRIPTION**

Metal lath suspensions are commonly made below virtually all types of construction for fire-rated and non fire-rated plaster ceilings. Framing of 1 1/2" C.R. channels are spaced up to 4' o.c. perpendicular to joists and are cross-furred with 3/4" C.R. channels spaced according to specifications for types and weight of metal lath. Lath is then properly lapped at sides and ends and tied every 6" to the 3/4" channel.

Where it is advisable to install unrestrained ceilings, having perimeters separated from adjacent walls or partitions, galvanized casing beads should be installed around the periphery.

Metal Lath is frequently used for furred as well as suspended ceilings.

Metal lath is used for furring from wood, concrete and steel joists.

**RECOMMENDATIONS**

1. Control joints should be installed in ceilings without perimeter relief with a maximum distance between such joints of 30' with a maximum undivided area of 900 sq. ft. With perimeter relief, maximum distance is 50' with maximum undivided area of 2500 sq.ft.

2. Use three-coat plastering on metal lath.

**TECHNICAL DATA**

### SIZE AND SPACING OF CHANNEL FOR SUSPENDED CEILINGS

<table>
<thead>
<tr>
<th>Center to Main Channel</th>
<th>Size of Cold Rolled Channel</th>
<th>Spacing of Channel</th>
</tr>
</thead>
<tbody>
<tr>
<td>up to 3' (914 mm)</td>
<td>1 1/2&quot; (38.1 mm)</td>
<td>4' (1219 mm)</td>
</tr>
<tr>
<td>up to 3'6&quot; (1067 mm)</td>
<td>1 1/2&quot; (38.1 mm)</td>
<td>3'6&quot; (1067 mm)</td>
</tr>
<tr>
<td>up to 4' (1219 mm)</td>
<td>1 1/2&quot; (38.1 mm)</td>
<td>3' (914 mm)</td>
</tr>
</tbody>
</table>

### SIZE AND SPACING OF CHANNEL FOR FURRED AND SUSPENDED CEILINGS

<table>
<thead>
<tr>
<th>Type of Lath</th>
<th>Support Spacing</th>
<th>Weight of Lath lbs. per sq. yd. (kg/m²)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diamond Mesh (flat expanded)</td>
<td>16&quot; (406 mm)</td>
<td>3.4 (1.9)</td>
</tr>
<tr>
<td>Flat Rib</td>
<td>16&quot; (406 mm)</td>
<td>2.75 (1.5)</td>
</tr>
<tr>
<td></td>
<td>19&quot; (483 mm)</td>
<td>3.4 (1.9)</td>
</tr>
<tr>
<td>3/8&quot; (9.5 mm) Rib</td>
<td>24&quot; (610 mm)</td>
<td>3.4 (1.9)</td>
</tr>
</tbody>
</table>

### MAXIMUM SPACING OF SUPPORTS FOR METAL LATH

**DETAILS**

Suspended Metal Lath Ceilings diagrams and illustrations are shown for various types of metal lath and plaster systems.
SPECIFICATIONS

SECTION 09 23 00
GYPSUM PLASTERING

The following paragraphs are for insertion into sections of generic specifications or generic/proprietary specifications covering gypsum plaster products. The National Gypsum Company product name follows the generic description in parentheses.

PART 1 GENERAL
1.02 REFERENCES
A. American Society for Testing and Materials (ASTM):

PART 2 PRODUCTS
2.02 MATERIALS
A. Gypsum Plaster Base:
   1. Regular: A gypsum core lathing board surfaced with absorptive paper on front, and long edges and complying with ASTM C 1396 (Kal-Kore BRAND Plaster Base).
      a. Thickness: 1/2"
      b. Width: 4'
      c. Length: 8' through 16'
      d. Edges: Tapered
2. Fire-Resistant: A gypsum core lathing board with additives to enhance the fire resistance of the core and surfaced with absorptive paper on front, and long edges and complying with ASTM C 1396, Type X.
   a. Thickness: 1/2" (Kal-Kore® Brand Fire-Shield C Plaster Base) or 5/8" (Kal-Kore® Brand Fire-Shield Fire-Shield C Plaster Base).
   b. Width: 4'
   c. Length: 8' through 16'
   d. Edges: Tapered

3. Regular, Foil-Backed: A gypsum core lathing board surfaced with absorptive paper on front, and long edges; backed with aluminum foil; and complying with ASTM C 1396 (Kal-Kore® Brand Foil-Back Plaster Base).
   a. Thickness: 1/2" (Kal-Kore® Brand Fire-Shield C Plaster Base) or 5/8" (Kal-Kore® Brand Fire-Shield and Fire-Shield C Plaster Base).
   b. Width: 4'
   c. Length: 8' through 16'
   d. Edges: Tapered

B. Gypsum Plaster:


2. Base Plaster: Gypsum plaster with mill-mixed perlite aggregate complying with ASTM C 28 (Gold Bond® Brand Gyposilite Plaster).


PART 3 EXECUTION

3.01 INSTALLATION

A. Metal Lath, Gypsum Plaster Base, and Accessories: In accordance with ASTM C 841.

B. Gypsum Plaster: In accordance with ASTM C 842 and the manufacturer’s recommendations, National Gypsum Company “Gypsum Construction Guide.”

C. Tolerances: For flatness of surface, do not exceed 1/4” in 8’ for bow or warp of surface and for plumb and level.

RECOMMENDATIONS

BASECOAT PLASTER PROCEDURES

Two-Coat Work

Apply first coat with firm pressure to form good bond on the Gypsum Plaster Base or masonry base; then immediately double back (without cross-raking first coat) using material of same proportion to build proper basecoat thickness. Straighten to a true surface (without applying water) to receive the second (finish) coat.

Surface should be left sufficiently rough and porous to provide suitable bond of the finish coat.

Three-Coat Work

“Scratch” – “brown” – finish is generally used for metal lath or masonry bases, and is performed in discrete steps.

- Scratch (first) coat: Should be applied with sufficient material and pressure to obtain good bond over solid bases or form full keys through metal lath. Provide suitable material thickness for scratching (raking) to obtain good mechanical keying of the “brown” coat.
- Brown (second) coat: Shall be applied after the scratch (first) coat has set hard and still damp. Apply to give mass and surface as for double-back in two-coat work.

Finish Coat Plaster Procedures

General Requirements (Basecoat Condition)

Application over a partially dry basecoat is preferred. If basecoat is thoroughly dry, wet with even application of water to a semi-dry condition. Avoid excess water. Do not apply finish to basecoats having free water on the surface.

Application – Gauged Lime Putty Trowel Finish

Smooth Finishes

- Scratch in tightly over the basecoat, covering the surface completely, then double back immediately with material from the same gauge, filling out to a true, even surface with total thickness of not more than 1/16”.
- Allow finish to “draw” (lose moisture to basecoat and ambient air) and firm up – then trowel it well to compact and close the surface under the edge of the trowel. Dash water on the surface for lubrication and development of soft material along trowel’s edge to fill surface depressions or other blemishes.
- When finish plaster setting action is under way, a second (final) water troweling can be done with strong pressure to obtain a polished surface if desired.

Texture Finishes

- Apply finish as above to a true, even surface with total thickness not more than 1/8”.
- Allow finish to “draw” (lose moisture to basecoat and ambient air). Then begin floating, texturing, or skip troweling to achieve desired texture. Additions of clean graded silica may be required to achieve desired texture.

Drying

Conventional plaster systems should be allowed to dry 30 days minimum under ambient conditions prior to final decoration. Variations in humidity or poor drying conditions may affect the drying process.

Storage

Gypsum plaster must be kept dry before use. Storage conditions vary with location and seasonal changes, which may affect storage life. These conditions may affect product characteristics such as setting time, working qualities, component separation, or lumping, etc. Such aging is normally a function of exposure to humid air, temperature, and physical support in warehousing. Adverse storage conditions or prolonged storage may affect the working qualities of the product. Rotate inventory frequently for best results.