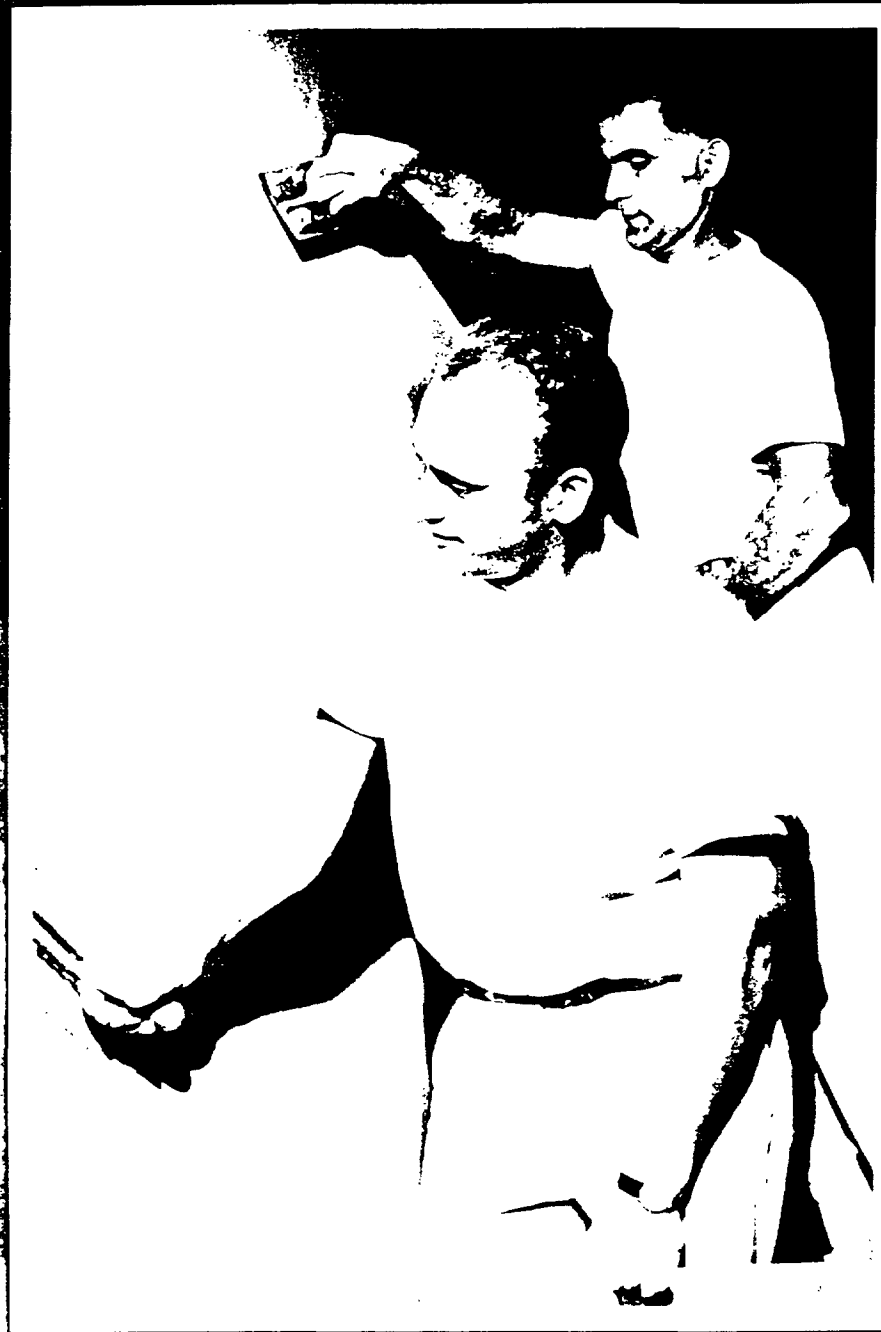
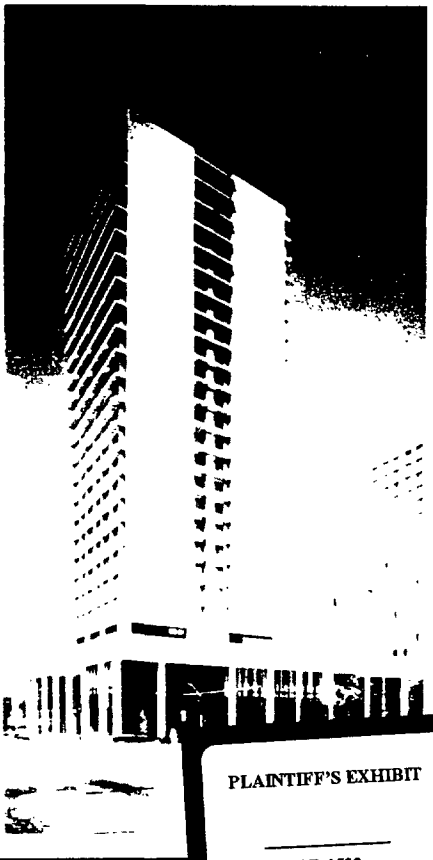
GP

1971



- Gypsum Plaster
- Gypsum Lath
- Plaster Wall Systems
- Plaster Ceiling Systems
- Dens-Cote® Plaster Veneer Systems



Georgia-Pacific Corporation

January, 1971

9 FINISHES

Lath and Plaster

PLAINTIFF'S EXHIBIT

GP-1522

SGP 0023002

1 GYPSUM PLASTER

G-P/Bestwall laths and plasters, although always consistently a superior product, have one unique and important additive which makes them very much in demand. This is the addition of uniform length, high strength glass filament fibers. The fiber glass content of G-P/Bestwall fibered plasters and laths is an important factor to consider in specifying lath and plaster construction.

Fast Machine Application

Literally miles of glass fibers (19.75 miles per bag of fibered plaster) offer greater resilience and bonding properties that resolve many job difficulties. Glass fiber reinforcement provides greater speed in application which in turn results in better economy.

G-P/Bestwall plasters, designed for machine application, give greater construction economies and added design possibilities. Glass fibered plaster may be used when fibered plaster is specified. Due to the plasticity and richness of these plasters they will not clog the mixer, hose or nozzle. Even the glass fibers go through.

DENS-COTE® Veneer Systems

Dens-Cote (one coat) system is designed for use whenever a strong durable finish with maximum speed and minimum material is desired. One application of only 3/32" minimum thickness Dens-Cote Smooth Finish (or Textured Finish) over Dens-Cote Gypsum base, is all that is needed to give lasting strength and beauty to any construction.

Dens-Cote System (two coat). This system is designed for those who prefer the conventional type finishes but desire modern speed and minimum material. The specially designed Dens-Cote Plaster, stronger than conventional sanded plasters, base shall be applied 1/8" thick over Dens-Cote Base to achieve the best results. As in the one coat system, the Dens-Cote Base Plaster can also be used over porous masonry block with excellent results.

After the first coat of Dens-Cote Base Plaster has set, finish with lime putty and gauging for a conventional smooth finish, or use any sand float textured finish. For a hard durable smooth finish, use Dens-Cote Smooth Finish.

Description	Uses	Features
Neat gypsum plaster (Unfibered, Fibered, and Extra Fibered) Basecoat plasters bond securely to any standard plaster base including gypsum lath, metal lath and masonry units. Neat gypsum plasters require addition of aggregate and water.	1. UNFIBERED: is used for scratch coat on solid surfaces and for the brown (second) coat on any backing. 2. FIBERED: is recommended to provide greater wet cohesion and to minimize droppings with open type lath. 3. EXTRA FIBERED: is used for greater wet cohesion over metal lath as may be specified.	DURABILITY: Applied according to specifications it provides uniformly strong, stable walls and ceilings. PLASTICITY: Special scientifically controlled process maintains plasticity and easy workability. FIRE RESISTANT: Gypsum's natural incombustibility offers superior fire protection.
Lite-mix plaster (Unfibered, Fibered, Masonry Mix) Basecoat plaster that is 50% lighter than Gypsum and sand plaster. Fibered mix contains glass fibers for added strength. Requires addition of water only.	1. UNFIBERED: is used for scratch coat on solid surfaces and for the brown (second coat on any backing.) 2. FIBERED: is recommended to provide greater wet cohesion and to minimize droppings with open type lath. 3. MASONRY MIX: Available for application on masonry bases.	FIRE RESISTANT: Perlite aggregate provides higher fire resistance than sanded plasters. MIXES SMOOTHLY: Has no tendency to clog mixer or to block the nozzle of the plaster gun. HIGH INSULATION VALUE: Provides greater insulation than sanded gypsum plaster.
Wood fibered gypsum plaster Non-staining shredded wood fiber additive provides good working properties when used without aggregate.	Intended for use without aggregate as scratch and brown coat, but may be mixed with one part of sand. For scratch coat over high suction masonry it is recommended that one part of sand be used.	ECONOMY: Can be applied quickly and easily. STRENGTH: Has 3 times greater compressive and tensile strength than sanded plaster; up to 2½ times greater resistance to lateral impact and 50% greater surface hardness.
Gauging plaster Specially ground gypsums designed to blend with lime putty.	Mixed with lime to provide base for final wall and ceiling decoration. Usually over a gypsum plaster basecoat, 1/16" to 1/8" thick. Available in "Slow Set" or "Quick Set."	WHITE COAT FINISH: Satin Spar Gauging Plasters are very white and when properly mixed with lime putty they provide glossy smooth, flawless, surface of uniformly excellent, satin-like finish.
Finishing limes Produced from ground quicklime by adding an exact amount of water which chemically converts the quicklime to calcium and magnesium hydroxides. Completely aerated to prevent lumping in the bag.	Precision ground to produce the correct fineness for maximum plasticity and workability. To be mixed with gypsum gauging or Keene's cement for lime putty white coat.	Supplies a white durable finish that preserves and beautifies interior walls and ceiling. Makes walls less brittle, less subject to cracks.
Prepared trowel finish A pre-mixed gypsum finish coat plaster requiring addition of water only. Made from high grade gypsum rock of white or local gray.	For any indoor plastering installation where a smooth hard finish is desired.	STRENGTH: Produces very hard surfaces, approximately twice the strength of ordinary lime-gauging finishes. EASY DECORATION: Can be decorated as soon as dry.
Keene's cement A high strength, "dead-burnt" white gypsum gauging plaster. Provides stronger, harder surface when substituted for gauging plaster in a lime mix. Less lime, harder finish. Available regular and Fast Set.	Because of denser, harder surface has higher resistance to abrasion and water absorption it is highly suitable for kitchens, bathrooms, hospitals, and any area where wear and moisture resistance are important.	LOW WATER ABSORPTION: Because of high density, has low absorption. VARIOUS FINISHES: Mixed with varying portion of lime, gives standard, medium hard or extra hard finishes.

SGP 0023003

For rated fire resistive construction use G-P Bestwall gypsum products with G-P Paneling. See "Georgia-Pacific Guide to Products for Interior Paneling."

QUICK SELECTOR CHART For G-P/Bestwall Plaster Products

NAME	USES	COVERAGE (sq. yds per ton)	THICKNESS
NEAT			
Unfibered	Scratch coat on solid surfaces. Brown coat on any surface.	(sanded 2:1) Gypsum Lath: 190-220 Metal Lath: 100-130 Gypsum Tile: 210-240 Clay Tile: 165-200	½" ½" ⅜" ½" ⅜"
Fibered	Scratch and brown coat on all surfaces except monolithic concrete.	(same as above)	(same as above)
Extra Fibered	Scratch coat on metal lath but may be used over all bases except monolithic concrete.	(same as above)	(same as above)
LITE-MIX Unfibered, Fibered	Where lightweight desired. Ready mixed, add water only. Faster, easier application.	Gypsum Lath: 135-150 Metal Lath: 75-90	½" ⅜"
Masonry Mix	For use over high suction masonry base.	Gypsum Tile: 135-150 Clay Tile: 110-125	½" ⅜"
WOOD FIBERED	Without sand-scratch coat and brown coat on all backings except masonry. With sand-scratch coat on masonry and brown coat on all backings.	(without sand) Gypsum Lath: 100-120 Metal Lath: 50-65 Gypsum Tile: 85-100 Clay Tile: 65-85	½" ⅜" ½" ⅜"
SATIN SPAR GAUGING (White)	Mixed with lime for use over gypsum basecoat. Great workability, hard, smooth white surface. Available in quick set or slow set.	1600 (3:1) Mixed 3 parts lime putty to 1 part gauging (Min.)	⅛"
G-P/BESTWALL GAUGING	Mixed with lime for use over gypsum basecoat. Selected quality rock, light gray color. Gives hard, smooth surface. Available in quick or slow set.	1600 (3:1) Mixed 3 parts lime putty to 1 part gauging (Min.)	⅛"
PREPARED TROWEL FINISH	Where uniformity and extra hardness are desired. Can be decorated when dry—no waiting period. For use over gypsum basecoat only. White or gray color. Mixed with water only.	350-400	⅛"
PREPARED SAND FLOAT FINISH	Same as prepared trowel finish except surface will be textured. White or gray color.	250-275	
KEENE'S CEMENT	Mixed with lime. Gives strong, dense surface with resistance to abrasion and water. Two sets regular and fast finish.	(4:1 Mix) 550	⅛"
MOLDING	Made from rock over 98% pure. Gives hard, strong molds and coats with low expansion. Mixed with lime and water for ornamental features.		
DENS-COTE SMOOTH FINISH	Mixed with water only. For thin coat application to Dens-Cote Gypsum Base.	Up to 400	1/32" Minimum
DENS-COTE TEXTURE FINISH	Same application as Smooth Finish. Mill mixed texture material, texture with float as desired.	Up to 400	1/32" Minimum
DENS-COTE BASE PLASTER	First coat in two coat veneer plaster system. Finish may be Smooth Finish or Lime Putty mixed with gauging. Dens-Cote Smooth or Textured finish may be applied to masonry Block in two coat application. Base coat minimum thickness of ⅛" or enough to straighten wall. Finish coat may be smooth or textured as desired.	Up to 400	1/32" Minimum
FINISHING LIME			
SMOOTH FINISHING (Normal Hydrated) **BUILDERS** (Autoclaved)	(Ohio Dolomite) Mixed with gauging, molding plaster or Keene's Cement to give plasticity, whiteness and bulk.	Up to 750	⅛"

LIME PRODUCTS

G-P/Bestwall Smooth Finish Lime

A normal hydrated lime that must be soaked approximately 16 hours and then blended in proper proportions (one gallon of gauging plaster to every three gallons of lime putty) with gypsum gauging plaster which provides initial set and strength avoiding shrinking cracks.

G-P/Bestwall Builders Lime

This finishing lime is made from the same quicklime as G-P/Bestwall Smooth Finishing Lime, but is hydrated in a steel Autoclave (pressure vessel). Water is injected and after the quicklime satisfies its chemical thirst for water, the lime is removed from the Autoclave chamber as dry hydrate and undergoes aeration to remove any possible uncombined moisture.

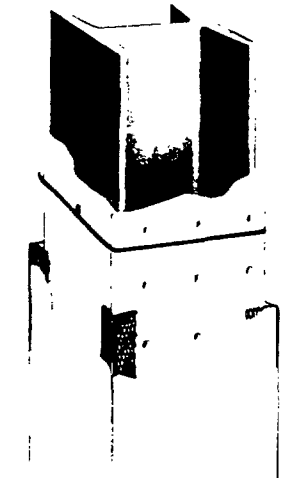
This lime has less than 8% of unhydrated oxides and prevents "lime pops." Builders Lime need only be mixed with water to a putty consistency and can be used without soaking. G-P/Bestwall Builders Lime has more workability and plasticity than other finishing lime.

G-P/Bestwall Mason's Lime

This is normal hydrated lime made from quicklime and—except for its coarser quality and shorter aeration process—the manufacture, hydration and milling are approximately the same as for G-P/Bestwall Finishing Limes. G-P/Bestwall Mason's Lime should be soaked at least 12 hours in putty form before use in mortar . . . it should not be used as finishing plaster because the finish will not be up to standard and "pops" may occur.

G-P/Bestwall Speedy Mason's Lime

This is the original Type "S" Special hydrated lime, a quick mix lime that need not be soaked in putty form before use. Produced by a continuous pressure on Autoclave system. G-P/Bestwall Speedy Mason's Lime differs from Bestwall Autoclaved Finishing Lime only in the coarser quality of the quicklime used. Efflorescence is minimized because the lime is free of soluble salts.



SGP 0023004

Beam fireproofing

Fireproofing of beams and columns is accomplished by abutting ⅜" G-P/Bestwall Perfolath around the perimeter of the beam or column and plastering the thickness required for desired fire resistance rating.

The Perfolath is held by tying double strands of the wire around the lath and spaced 16" o.c. corner heads applied by staples or tie wire provide ground for proper thickness as well as straight true corners.

Sanded plaster is used for fire ratings up to three hours. Lightweight aggregates provide fire ratings up to four hours. A four hour column rating requires two layers of ½" thick gypsum lath.

2 GYPSUM LATH

Type and Size	Uses	Description
Plain lath, type X Consists of core of gypsum rock reinforced with glass fibers sandwiched between two layers of special paper covering. This is standard basic construction for all Bestwall Lath. SIZE: 16"x48", 16"x96", ⅜" or ½" thick (16⅛"x48" West Coast only)	The standard gypsum plaster base for nail, staple or clip application to wood or steel framing.	The exposed layer is porous and absorbent, permitting water in the plaster to penetrate the surface. As plaster sets, gypsum crystals pierce the paper surface forming mechanical key on the lath thus assuring maximum bond. Glass fiber reinforcement gives the lath added strength and fire resistance. • All G-P/Bestwall Gypsum Lath, having glass fiber, is Type X • Printed face so identifies lath. Lath paper has water resistant inner plies which prevent the water in the plaster from soaking through it and thus minimizes sagging of the lath and plaster. The layer against the core is porous and absorbent so as to bond the core as the plaster sets.
Long-length lath type X The same structure as Plain Lath except in dimensions SIZE: Available in ½" or 1" thicknesses—24" x floor to ceiling lengths (12' maximum).	This construction material is especially designed for use as a plaster base for thin (2") solid partitions providing fire resistive ratings up to two hours. Can also be used with furring over exterior masonry walls as a plaster base.	Long Length Lath comes in lengths up to 12', providing for wall assemblies in floor to ceiling heights. Ideal for solid plaster partitions. Since there is less lathing in job—there is a saving in construction costs. Glass fiber reinforced for added strength • Fast and economical to erect. **Application:** Both plain and Long-Length Lath may be applied by nailing to wood and nailing-type steel framing, and to wood framing by staples. They can be easily attached to metal sections and furring, and to wood with lath clips. Resilient type clips reduce cracking and lessen sound transmission.
Pinholath, type X Plain Lath construction surface perforated with 1/16" dia. holes. Space ⅛" o.c. diagonally. SIZE: 16"x48", 16"x96", ⅜" or ½" thick (16⅛"x48" West Coast only)	Specially designed for machine applied plasters. Fast, high, even water absorption speeds plaster application by holding plaster in place during rodding and darbying. When attached to ceilings by clips, three coat work is required. The Scratch Coat should be dry before applying Brown Coat if high humidity condition exists. When Perimeter Clips are used on ceilings, Butt and Center Clips should be used.	G-P/Bestwall PINHOLATH is plain lath surface-perforated in manufacturing with pin holes no larger than 1/16" in diameter, spaced ⅜" o.c. diagonally. Specially designed for machine applied plasters. Its unique feature permits rapid suction of water from plaster mix to achieve perfect plaster consistency speeding plaster application. There is no plaster slide, no backtracking, no costly delays. Plaster stays in place during rodding and darbying which can be done sooner when using PINHOLATH. Full base coat coverage is obtainable in one operation.
Perfolath Plain lath construction with ¼" diameter holes spaced 4" o.c., 48 holes per sheet. SIZE: 16" x 48", ⅜" thick.	Applications identical to Plain Lath. A wood stud partition faced with Perfolath and full thickness of plaster specified has one-hour fire rating. Perforations require application of full thickness of plaster and require separate scratch and brown coats.	G-P/Bestwall Perfolath is plain lath with ¾" diameter holes spaced 4" center to center. The perforations permit the plaster to push through the holes and "mushroom" out the back of the lath, thereby forming a mechanical key. This key plus the natural bond to the face paper, provides a double bond for plaster. **Application:** Perfolath may be applied by nailing to wood and nailing-type steel framing, and to wood framing by staples. It can be easily attached to metal sections and furring, and to wood with lath clips. Resilient type clips reduce cracking and lessen sound transmission.
Insulating lath, type X Plain lath with aluminum foil laminated on back. SIZE: 16" x 48", ⅜" or ½" thick. Rounded Edges	Designed primarily for application to exterior walls and top floor ceiling. Back side must face a minimum air space of ¼" to develop reflective insulation value.	Contructed exactly as PLAIN LATH this lath has aluminum foil laminated to the back. This foil reflects up to 90% of radiant heat and acts as an efficient vapor barrier. Designed primarily for application to exterior walls and top floor ceilings. When installed the aluminum reflective surface must face a minimum air space of ¾" to develop reflective insulation value.
Dens-cote gypsum base A 4' wide, long-length, tapered edged, plain lath construction it has a highly absorbent lath type face paper with surface pin holed. SIZE: 4' x 8', 10' and 12', ½" thick (⅜" and ⅝", ½" and ⅝" Type X Firestop on order)	Specially designed for reception of Dens-Cote Smooth and Texture Finish and other thin coat plasters.	G-P/Bestwall Dens-Cote Gypsum Base is a ½" and ⅝" thick, 4' wide, tapered edge, gypsum board product, specifically designed to receive Dens-Cote Plasters. It has a highly absorbent lath type face paper with the surface pinholed. Available in lengths up to 12', is shipped twin mounted. Large sheets decrease number of joints, giving greater strength and crack resistance to wall and ceiling surfaces. The Dens-Cote System is designed for fast erection and early occupancy; produces a wall with a strong, hard monolithic finish. Combines economy of installation with virtually unlimited decorative possibilities.

SGP 0023005

 For rated fire resistive construction use G-P Bestwall gypsum products with G-P Paneling. See "Georgia-Pacific Guide to Products for Interior Paneling."

3 PLASTER WALL SYSTEMS

Technical data—Fire ratings & sound transmission values for gypsum lath & plaster wall systems

CONSTRUCTION		TYPE BASE	PLASTER MIX (1 part of Gypsum Plaster (100 pounds) to cu. ft. aggregate)	PLASTER THICKNESS (Face of Lath to Face of Finished Surface)	FIRE RATING	WEIGHT LBS. PER SQ. FT.	STC
PARTITIONS			(2 Mixes—Scratch and Brown) (1 Mix—Scratch Double-Up)				
Description	Thickness						
2″ x 4″ Wood Studs 16″ on Center	5⅜″	⅜″ Bestwall Plain Gypsum Lath	Gypsum-Sand 1:2	½″	1 Hour	15	40
	5⅜″	⅜″ Bestwall Plain Gypsum Lath	Gypsum-Perlite 1:2	½″	1 Hour	12	—
	5⅜″	⅜″ Plain Gypsum Lath	Gypsum-Sand 1:2, 1:2	½″	45 Minutes	14.7	40
	5⅜″	⅜″ Plain Gypsum Lath	Gypsum-Wood Fiber	½″	1 Hour	—	—
	5⅜″	⅜″ Perforated Gypsum	Gypsum-Sand 1:2, 1:2	½″	1 Hour	—	—
	5⅜″	⅜″ Perforated Gypsum	Gypsum-Perlite 1:2, 1:2	½″	1½ Hours	—	—
	5⅜″	Metal Lath 3.4 D.M.	Gypsum-Sand 1:2, 1:3	¾″	1 Hour	—	40
	5⅜″	Metal Lath 3.4 D.M.	Gypsum-Wood Fiber	¾″	2 Hours	—	41
	5⅜″	Metal Lath 3.4 D.M.	Gypsum-Perlite 1:2, 1:2	¾″	1 Hour	—	40
	5⅜″	Metal Lath 3.4 D.M.	Gypsum-Vermiculite 1:2, 1:2	¾″	1 Hour	—	40
	4¼″	One layer ½″ Bestwall Firestop Dens-Cote base, both sides.	Dens-Cote smooth finish	3/32″	1 Hour	7.7	35
	6″	Two layers ⅝″ Bestwall Firestop Dens-Cote base, both sides.	Dens-Cote smooth finish	3/32″	2 Hours	13.8	41
Solid Partitions	2″	½″ Long Length Gypsum Lath	Gypsum-Sand 1:1, 1:2	¾″	1 Hour	16.5	34
	2″	½″ Long Length Gypsum Lath	Gypsum-Perlite 1:2	¾″	1½ Hours	—	—
	2″	½″ Long Length Gypsum Lath	Gypsum-Perlite or Vermiculite 1:2, 1:2	¾″	2 Hours	10.9	37
	2″	Metal Lath	Gypsum-Sand 1.2, 1:2	1″	1 Hour	18.1	36
	1½″	Metal Lath	Gypsum-Perlite 1:2	¾″	1 Hour	7.4	33
	2½″	Metal Lath	Gypsum-Perlite or Vermiculite 1:2, 1:2	1¼″	2 Hours	—	34
Steel Frame	5⅛″	⅜″ Bestwall Pinholath, 3⅝″ Stud	Gypsum-Sand 1:2	½″	1 Hour	14	44
	5⅛″	⅜″ Bestwall Pinholath, 3⅝″ Stud	Gypsum-Perlite 1:2	½″	1 Hour	10	—
	5⅛″	⅜″ Plain Gypsum Lath, 3⅝″ Stud	Gypsum-Perlite 1:2	½″	1 Hour	16	35
	5⅛″	⅜″ Bestwall Pinholath, 3⅝″ Stud	Gypsum-Sand 1:2	½″	1 Hour	16 to 21	—
	5⅛″	⅜″ Perforated Gypsum Lath, 3⅝″ Stud	Gypsum-Sand 1:2, 1:2	½″	1 Hour	16 to 21	35
	5⅛″	Metal Lath, 3⅝″ Stud	Gypsum-Sand 1:2, 1:3	¾″	1 Hour	21	41
	5⅛″	⅜″ Bestwall Gypsum Lath-Type "X" attach with clips each side of 2½″ steel stud.	Gypsum-Sand 1:2	½″	1 Hour	11.8	45
	3⅞″	⅜″ Perforated Gypsum Lath, 1⅝″ Stud	Gypsum-Perlite 1:2, 1:2	¾″	2 Hours	15	—
	3 1/16″	One layer ⅝″ Bestwall Firestop Dens-Cote base, both sides, 1⅝″ metal stud.	Dens-Cote smooth finish	3/32″	1 Hour	7.0	38-40
	4 11/16″	Two layers ½″ Bestwall Firestop Dens-Cote Base. Both sides—2½″ metal stud.	Dens-Cote smooth finish	3/32″	2 Hours	9.8	48-50
	6 5/16″	Two Layers ⅝″ Bestwall Firestop Dens-Cote Gypsum Base, Both Sides—3⅝″ metal stud	Dens-Cote smooth finish	3/32″	2 Hours	12.8	49
COLUMNS							
Columns (Steel)		⅜″ Pefrorated Gypsum Lath	Gypsum-Sand 1:2½	½″	1 Hour	—	—
		⅜″ Perforated Gypsum Lath	Gypsum-Sand 1:2, 1:3	1⅜″	2 Hours	—	—
		⅜″ Perforated Gypsum Lath	Gypsum-Perlite 1:2½	1″	2 Hours	—	—
		⅜″ Perforated Gypsum Lath	Gypsum-Perlite 1:2, 1:3	1⅜″	3 Hours	—	—
		2 Layers ½″ Plain Gypsum Lath	Gypsum-Perlite 1:2, 1:3	1½″	4 Hour	—	—
		Metal Lath	Gypsum-Sand 1:2, 1:3	⅝″	1 Hour	—	—
		Metal Lath	Gypsum-Perlite 1:2, 1:3	1¾″	4 Hours	—	—

SGP 0023006

PLASTER CEILING SYSTEMS

Technical data—Fire ratings & sound transmission values for gypsum lath & plaster ceiling & floor assemblies.

CONSTRUCTION	TYPE BASE	PLASTER MIX 1 part of Gypsum Plaster (100 pounds) to cu. ft. aggregate	PLASTER THICKNESS Face of Lath to Face of Finished Surface	FIRE RATING	WEIGHT LBS. PER SQ. FT.	9 FREQUENCY AVERAGE (1)
Wood Joists and Floor						
	⅜" Bestwall Pinholath	Gypsum-Perlite 1:2	⅝"	1 Hour	—	—
	*½" Bestwall Pinholath	Gypsum-Sand 1:2	½"	1 Hour	—	—
	*½" Bestwall Type X Gypsum Lath	Gypsum-Sand 1:2	½"	1 Hour	—	—
	⅜" Perforated Gypsum Lath	Gypsum-Sand 1:2	½"	45 Minutes	12.5	40
	*½" Perforated Gypsum Lath	Gypsum-Sand 1:2	½"	1 Hour	—	—
	⅜" Perforated Gypsum Lath	Gypsum-Perlite 1:2	½"	1 Hour	—	—
	Metal Lath	Gypsum-Sand 1:2, 1:3	⅝"	1 Hour	17.5	32 to 34
	Metal Lath	Gypsum-Perlite 1:2, 1:2	½"	1½ Hours	—	—
Assembly No. 1	½" Bestwall Firestop Dens-Cote Base, one layer nailed.	Dens-Cote Smooth or Textured Finish	5/32"	1 Hour	13.9	—
Assembly No. 2	½" Bestwall Firestop Dens-Cote Base, one layer on resilient Channel	Dens-Cote Smooth or Textured Finish	5/32"	1 Hour	13.9	44
Assembly No. 3	⅝" Bestwall Firestop Dens-Cote Base, two layers with resilient channel, 24" o.c. between layers	Dens-Cote Smooth or Textured Finish	5/32"	2 Hours	16.9	—
Steel Joists (2" Floor Slab)						
Furring Channels						
16" o.c.	⅜" Perforated Gypsum Lath (Clips)	Gypsum Perlite 1:2	⅝"	1 Hour	—	—
16" o.c.	⅜" Perforated Gypsum Lath (Clips)	Gypsum Vermiculite 1:2	⅝"	1 Hour	—	—
16" o.c.	⅜" Perforated Gypsum Lath (Clips)	Gypsum Perlite 1:2, 1:2	1"	1½ Hours	—	—
16" o.c.	⅜" Perforated Gypsum Lath (Clips)	Gypsum Perlite 1:2	½"	—	—	—
12" o.c.	⅜" Perforated Gypsum Lath (Clips)	Gypsum Perlite 1:2, 1:2	11/16"	3 Hours	—	—
16" o.c.	⅜" Perforated Gypsum Lath Plus 1" Mesh	Gypsum Perlite 1:2	9/16"	3 Hours	—	—
12" o.c.	⅜" Perforated Gypsum Lath (Clips) Plus 1" Mesh	Gypsum Perlite 1:2, 1:3	1"	4 Hours	—	—
	Metal Lath	Gypsum Sand 1:2, 1:3	⅝"	2 Hours	—	—
	Metal Lath	Gypsum Perlite 1:2, 1:2	13/16"	3 Hours	—	—
	Metal Lath	Gypsum Vermiculite 1:2, 1:2	1"	4 Hours	—	—
Steel Floors 2 to 2½" Concrete Floor with Suspended Ceilings						
12" o.c.	⅜" Perforated Gypsum Lath Plus Clips and Wire Reinforcing	Gypsum Perlite 1:2	½" on Ceilings (⅞" on Beam)	3 Hours	—	—
	Metal Lath	Gypsum Perlite 1:2, 1:3†	1"	4 Hours	—	—
	Metal Lath	Gypsum Wood Fiber	⅞"	4 Hours	-	—
†Assembly No. 1 2½" Concrete floor over Metal Lath over Steel Bar Joists 24" o.c.	½" Bestwall Firestop Dens-Cote Base, one layer screwed metal furring 24" o.c.	Dens-Cote Smooth Finish	5/32"	2 Hours	39.4	—
†Assembly No. 2 2" Concrete Floor on joists 24" o.c.	⅝" Bestwall Firestop Dens-Cote Base, one layer screwed metal furring 24" o.c.	Dens-Cote Smooth Finish	5/32"	2 Hours	37.3	

SGP 0023007

NOTE: All tables are summaries only, based on tests at Underwriters' Laboratories, National Bureau of Standards, University of California, Ohio State University, Geiger and Hamme, Riverbank Laboratories and/or Ohio Research corporation sponsored by the G-P Gypsum Division, Gypsum Association, Metal Lath Association, Perlite Institute, Vermiculite Institute or others. The fire rating, weight and sound characteristics are based on a combination of specific details as tested and published.

More complete Listings and Details are available.

INCONSISTENCIES IN TEST RESULTS ARE DUE TO TESTS OVER A PERIOD OF MANY YEARS AND VARIATIONS IN LABORATORY FACILITIES.

All of the test results have been obtained under laboratory testing conditions where controlled environment reduces variables to a minimum. In the field, such laboratory conditions are not always met, since many other variables are introduced. Laboratory results may exceed results of field tests, but the laboratory tests under controlled conditions are the only logical way to compare the performance of different assemblies. The Gypsum Division of the G-P Corporation makes no warranty that the performance of assemblies in the field will have a performance equal to or better than that developed in the test.

NOTE: Floor and Ceiling assemblies (Incombustible), Bestwall Firestop Dens Cote Base, may be direct attached or suspended.

 For rated fire resistive construction use G-P/Bestwall gypsum products with G-P Paneling. See "Georgia-Pacific Guide to Products for Interior Paneling."

5 DENS-COTE PLASTER VENEER SYSTEMS

DENS-COTE® base

WOOD FRAMING

1. Horizontal Application—Apply Dens-Cote base horizontally to framing so that ends fall on framing members. Nail with GWB-54 nails or equal, meeting ASTM C-514 having approximately ¼" heads. Length of nail shall be that which will provide at least ¾" penetration into studs. Space nails on both edge and intermediate supports 7" o.c. (maximum) on ceilings and 8" o.c. (maximum) on sidewalls keeping ⅜" from edges of base. Stagger end joints on opposite sides of partition.

METAL FRAMING

1. Horizontal Application—Set G-P/Bestwall 25 gauge metal studs spaced 24" o.c. into G-P/Bestwall floor and ceiling track. Apply Dens-Cote Base (½" or ⅝") using 1" self-tapping sheet metal screws and a power driven screw driver. Space screws vertically 12" o.c. (max.) on edge keeping ⅜" (min.) from the edge. Stagger end joints on opposite sides of partition.

DENS-COTE® OVER MONOLITHIC CONCRETE

To insure an adequate bond, a bonding agent conforming to ASTM C-631-68T should be applied in accordance with manufacturers' specifications, prior to the application of Dens-Cote Plaster.

DENS-COTE® OVER MASONRY BLOCK

Apply in two coats. Trowel first coat on sufficiently to straighten wall, but do not trowel smooth. After first coat sets, trowel on second coat.

DENS-COTE® one coat system

Georgia-Pacific/Bestwall's Dens-Cote one coat System fulfills its reputation as a system that provides quality walls for either residential or commercial constructions. The Dens-Cote one coat System is used whenever a strong durable finish with maximum speed and minimum material is desired. One application of only 3/32" minimum Dens-Cote Smooth Finish (or Textured Finish) over Dens-Cote gypsum base is all that is needed to give lasting strength and beauty to any construction. Although Dens-Cote Smooth Finish (or Textured Finish) is designed to be used over Dens-Cote Gypsum Base, it works equally as well over porous masonry block.

APPLICATION—Add one bag (80 lb.) of Dens-Cote Smooth Finish* to 3½ gal. of water with the mixer turning. Bring the mix to the desired consistency with additional water. A good working consistency will require approximately 4 gal. of water per bag (80 lb.).

Mix until the material is lump free. Do not overmix.

Dens-Cote Smooth Finish* normally has 1¼ to 1½ hour setting time, so do not mix more than can be applied and finished in that length of time.

Use 2½" wide glass fiber mesh to reinforce all flat joints and angles or conventional paper wallboard tape. Use 1" x 1" minimum-perforated metal corner beads. Corner beads should be set to regulate plaster thickness at ⅛" maximum.

The mesh must be embedded with Dens-Cote Smooth Finish* before the over-all application begins. If wallboard tape is used, use G-P Ready Mix Joint Compound or G-P Speed-Set Compound. At the same time, fill all metal corner beads. These areas may be allowed to set before the overall application is commenced. Trowel the first coat tightly over the entire wall or ceiling surface. This application should be uniform about 1/16" thick.

As soon as the first coat has taken up (5-10 minutes), double back with a leveling coat, the total thickness applied should be 3/32" thick minimum.

The final troweling must be completed before the set takes place.

Maintain a temperature of at least 55° F. in the working area 24 hours before, during and after application.

In hot weather reduce drafts and ventilation.

Plan the work so that it proceeds in an orderly fashion from one end of the surface to the other. This will promote a progressively uniform takeup.

DENS-COTE® two coat system

G-P/Bestwall's Dens-Cote two coat System is for those who prefer the conventional finishes but desire modern speed and minimum material.

APPLICATION—Mixing and taping instructions are the same as outlined for the one coat system.

Trowel a layer of Dens-Cote Base Plaster over the joint area.

Trowel the Dens-Cote Base Plaster tightly over the entire wall or ceiling surface. This application should be uniform —about ⅛" thick.

As soon as Dens-Cote Base Plaster has taken up sufficiently, straighten wall but do not trowel smooth. Leave rough so that finish coat will key properly.

Apply finish coat as soon as possible after base coat has set.

Finish with lime putty and gauging for a conventional smooth finish, or use any sand float textured finish.

If a hard durable smooth finish is desired use Dens-Cote Smooth Finish.

*Finish coat may be smooth or textured as desired.

FOR BEST RESULTS

1. Maintain a temperature of at least 55° F. 24 hrs. before, during and after application.
2. In hot weather reduce drafts and ventilation by covering door and window openings.

DENS-COTE® SYSTEM PRECAUTIONS

1. Use only clean potable water with Dens-Cote Plasters.
2. Keep mixing equipment and tools clean at all times.
3. Do not mix retarders, accelerators, or any other ingredient with Dens-Cote Base Plasters.
4. Keep Dens-Cote Plaster from freezing until it is set and dry.
5. **Use ONLY G-P/Bestwall Dens-Cote Base with the Dens-Cote System.**
6. Do not attempt to retemper Dens-Cote Base Plasters. Plan the work so that it proceeds in an orderly fashion from one end of the surface to the other. This will promote a progressively uniform takeup.

DENS-COTE® radiant heat plaster

DENS-COTE BASE

1. Horizontal Application—Apply ½" Dens-Cote base at right angles to framing so that ends fall on framing members. Nail with GWB-54 nails or equal, meeting ASTM C-514 having approximately ¼" heads. Length of nail should be that which will provide at least ¾" penetration into studs. Space nails on both edge and intermediate supports 7" o.c. (maximum) on ceilings. May also be applied over resilient channels.

NOTE: Firestop Dens-Cote Base shall be applied where fire ratings are needed.

APPLICATION OF JOINT REINFORCEMENT

Use 2½" wide glass fiber mesh or conventional wallboard tape and G-P Speed-Set Compound or G-P Ready Mix Joint Compound to reinforce all flat joints and angles. The mesh may be stapled to the Dens-Cote Base as it assures positive keying of the Dens-Cote Base Plaster to the mesh.

SGP 0023008

Install cables and thermostats and make proper connections after joints are taped.

Cables must be stapled tautly at a minimum of 2" apart. Use cables rated at 2.75 watts per lineal foot at 240 volts.

FOR BEST RESULTS

1. Maintain a temperature of at least 55° F. in the working area 24 hrs. before, during and after application of Dens-Cote plaster.

2. In hot dry weather, reduce drafts and ventilation by covering door and window openings.

3. Plan the work so that it proceeds in an orderly fashion from one end of the surface to the other. This will promote a progressively uniform takeup.

CAUTION

1. Use only clean drinkable water.

2. Keep mixing equipment and tools clean at all times.

3. Do not mix retarders, accelerators, or any other ingredients with Dens-Cote Radiant Heat Plaster.

4. Keep Dens-Cote Plaster from freezing until it is set and dry.

5. **Use ONLY G-P/Bestwall Dens-Cote® Base for Dens-Cote Radiant Heat Plaster Application.**

6. Do not attempt to retemper Dens-Cote.

STORE IN A DRY PLACE

APPLICATION OVER RADIANT HEATING CABLE

1. Trowel the first coat tightly over the ceiling using just enough Dens-Cote to fill in to the thickness of the Radiant Heat Cables.

2. After first coat has thoroughly set apply a leveling coat to cover the cables by at least ⅛". (Total thickness approximately ¼").

3. When the surface has become firm it may be troweled smooth or floated and textured as desired.

4. The Radiant Heated Ceiling may be painted after it is completely dry.

CAUTION: Do not use the Radiant Heat system to dry the plaster or decoration used on the ceiling. When using the system for the first time, turn thermostat to room temperature and raise temperature 5 degrees each day until desired maximum operating temperature is reached.

Specifications

1. Use G-P/Bestwall Dens-Cote Gypsum Base ½" or ⅝" thick by 4" wide with tapered edges and 8', 10' or 12' long. Apply ½" Dens-Cote Gypsum Base with ring shank nails 8" o.c. for side walls and 7" o.c. for ceilings, to framing members spaced a maximum of 24" o.c. For fire resistive ratings and other special installations ½" and ⅝" Firestop Dens-Cote base is available. For these installations use a fastener, with a ¾" to ⅞" penetration in wood framing members or fastener required for rating.

2. Use 2½" wide glass fiber mesh or paper wallboard tape to reinforce all flat joints and angles. Use 1" x 1" perforated metal beads for corners. For best results apply the mesh by embedding it with Dens-Cote Smooth Finish. This is accomplished by troweling a layer of Dens-Cote Smooth Finish over the joint area and pressing the glass fiber mesh into the Dens-Cote with a trowel. The mesh may be first stapled to the Dens-Cote Gypsum Base, if desired. In any case, the mesh must be embedded with Dens-Cote before the over-all application begins. Use G-P Triple Duty of Speed-Set Compound to embed paper tape. At the same time, fill all metal corner beads. These areas may be allowed to set before the over-all application is commenced. Corner beads designed for thin coat applications (not regular wallboard corner bead) should be set to regulate plaster thickness at 3/32" minimum. Nail or screw corner bead to framing member.

3. Trowel the first coat tightly over the entire wall or ceiling surface. This application should be uniform and about 1/16" thick.

4. As soon as the first coat has taken up (5-10 mins.), double back with a leveling coat, which will bring the total thickness applied to a minimum of 3/32".

5. †After the second coat has taken up (15-20 mins.), begin final troweling, use water if required. The final troweling must be completed before the set takes place, as evidenced by darkening of the surface.

6. Make joinings at angles. Ceilings should be done first, then sidewalls.

7. Coverage of Dens-Cote Smooth Finish is 14-16 square yards (3/32" thick) per 80 lb. bag.

Base Plaster

1. Trowel the Dens-Cote Base Plaster tightly over the entire wall or ceiling surface. This application should be uniform—about ⅛" thick.

2. As soon as Dens-Cote Base Plaster has taken up sufficiently, straighten wall but do not trowel smooth. Leave rough so that finish coat will key properly.

3. Apply finish coat as soon as possible after base coat has set.

4. Finish with lime putty and gauging for a conventional smooth finish, or use any sand float textured finish.

5. If a hard durable smooth finish is desired use Dens-Cote Smooth Finish.

FOR BEST RESULTS

1. Maintain a temperature of at least 55° F. in the working area 24 hours before, during and after application.

2. In hot weather reduce drafts and ventilation by covering door and window openings.

3. Plan the work so that it proceeds in an orderly fashion from one end of the surface to the other. This will promote a progressively uniform takeup.

†A specially formulated product, designated Dens-Cote Texture Finish, is recommended where swirl, sand finish, or other textured surfaces are desired. The same application procedure described for the smooth finishes should be followed with the exception of the final coat. For the texture application, the take up on the final coat will be somewhat dependent on the type of texture desired. In general, the finer the texture desired, the longer the take up time. In no case should the Dens-Cote be textured after it has commenced to set. Texturing may be accomplished with a float, brush, sponge or other suitable tools.

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SGP 0023009

GEORGIA-PACIFIC / GYPSUM DIV.

300 S. WET- AVE. PORTLAND, ORE. 97207

 For rated fire resistive construction use G-P Bestwall gypsum products with G-P Paneling. See "Georgia-Pacific Guide to Products for Interior Paneling."