Specifications

General Provision— (Temperature and ventilation conditions required by General Plastering Specifications shall apply.)

Scope—areas indicated in finish schedule shall be finished with acoustical plaster as described herein.

Materials— finish coat—acoustical plaster shall be HI-LITE (stipple or stipple-perforated finish) manufactured by the United States Gypsum Company. Color shall be white.

Mixing and Application of HI-LITE and the base-coat plaster shall be in strict accordance with the manufacturer's printed directions which are hereby made a part of this specification.

New *White* HI-LITE Acoustical Plaster *stipple or stipple-perforated finish*

MIXING—Machine mixing is required. Do not retemper or mix one batch with another. Keep all tools and equipment clean. Mix no more than can be used in one hour.

HI-LITE Acoustical Plaster Basecoat: Use approximately 34 quarts of water per bag. Add HI-LITE Basecoat to water and mix until mortar weighs 15 to 17 lbs. net per 12 qt. pail. (Approximately 10 to 15 minutes depending on speed of mixer.)

HI-LITE Acoustical Plaster Finish Coat: Use approximately 32 quarts of water per bag. Add HI-LITE Finish Coat to water and mix until mortar weighs 15 to 17 lbs. net per 12 qt. pail. (Approximately 6 to 12 minutes depending on speed of mixer.)

APPLICATION—HI-LITE Acoustical Plaster shall be applied in two coats to a uniform total thickness of ½" over a basecoat of RED TOP* Gypsum Plaster. A full scratch and brown coat that has been cross-raked is required over metal lath, ROCKLATH* Plaster Base and masonry bases (not monolithic concrete) to provide proper rigidity, strength, and a solid base for the acoustical plaster.

Basecoat: Apply the first coat of HI-LITE Acoustical Plaster Basecoat ⅜" thick, by scratching in and doubling back over a set, dry or partially dry basecoat. Darby lightly to a level surface.

Finish Coat: Apply finish coat ⅛" thick to set, wet or partially dry HI-LITE Basecoat, scratching in and doubling back, leaving surface free of trowel marks, working from wet edge to avoid joinings. When surface gloss has disappeared, stipple the surface with a rice stippling brush to a uniform texture. For a stipple-perforated finish, perforate when surface is firm enough to retain clean and open perforations, usually 30 minutes after stippling or at any time thereafter before surface is dry. Use a perforator furnished by the United States Gypsum Company. Perforations should number approximately 500 per square foot and should be at least 3/16" deep.

CAUTION—Protect plaster from moisture while in storage. During and after application furnish proper heat and adequate ventilation.

PLAINTIFF'S EXHIBIT

USG-1439

HI-LITE Acoustical Plaster (*Sound absorption data*)

	Thickness	Frequency 128	256	512	1024	2048	4096	NRC	Authority
Stippled	½"	.22	.25	.47	.72	.78	.80	.55	Nat'l Bur. of S
Stipple-Perforated	½"	.20	.24	.48	.77	.84	.86	.60	Nat'l Bur. of St'ds.

	Thickness	Frequency 125	250	500	1000	2000	4000	NRC	Authority
Stipple-Perforated	½"	.20	.24	.50	.76	.83	.76	.60	Riverbank Laboratory

Direct application of HI-LITE Acoustical Plaster to existing ceilings or concrete

HI-LITE may be applied over existing plaster and over new or existing smooth concrete ceiling with the use of asphalt emulsion (Type N-13 HPC or C-13 HPC) as a bonding agent.

On existing painted plaster or concrete ceilings, the surface must be dry, clean and *sound*. Calcimine or similar powder paints must be washed off and wax, grease or oil removed. Loose or improperly bonded plaster or paint must be removed and such areas repaired with wood fiber or patching plaster. Allow patches to dry 2 or 3 days. On new concrete ceilings which are smooth, level, and dense, surface must be dry, free of dust, oil, grease, or efflorescence.

Size any porous concrete, or porous or unpainted plaster surface with cut-back asphalt, shellac, or varnish to reduce suction before asphalt emulsion is applied.

Trowel on asphalt emulsion in thin coat not to exceed 1/16" thick. Cover entire ceiling area. The first ⅜" of HI-LITE should follow application of the emulsion as closely as possible and while the emulsion is still soft and plastic.

Darby first coat of HI-LITE to a true even surface with a minimum amount of pressure. Allow to set and partially dry. Apply HI-LITE finish coat as specified.

Application of HI-LITE Acoustical Plaster over monolithic concrete surfaces

Over properly prepared rough monolithic concrete surface apply BONDCRETE* plaster according to directions and not to exceed ¼" thickness on ceilings nor ⅜" on side walls. Apply the HI-LITE over the set, partially dry BONDCRETE basecoat, as specified above.

Directions for painting HI-LITE Acoustical Plaster

Remove all loose dirt or dust from HI-LITE by use of a vacuum cleaner with hose and brush attachment.

Paint: Should be water-thinned. TEXOLITE* Imperial is recommended. First coat—mix one part TEXOLITE paste to one part water by volume. Second coat if required—mix one part TEXOLITE paste to *two* parts water by volume.

Spray on with any gun with a medium fine spray. DeVilbiss spray gun, type MBD, with a No. 30 nozzle or equivalent is recommended. Use 30 to 40 lbs. pressure in the gun and 20 to 30 lbs. on the paint.

Hold nozzle 14 to 18 in. away from work. Use a slow, uniform motion. Cover surface in one pass. Do not pass over same area several times as this builds up paint unnecessarily.

Allow at least overnight drying between coats. If weather is extremely humid, allow additional drying as necessary.

*T. M. Reg. U. S. Pat. Off.

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