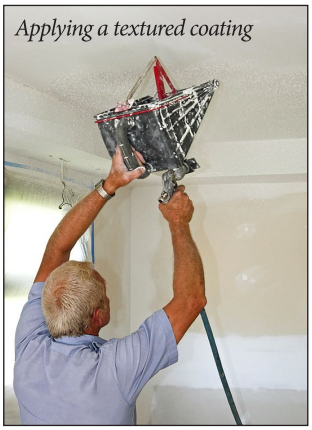
Perlite *for* Textured Coatings

The physical character of expanded perlite lends itself to a variety of special purposes—including use in textured coatings.

For a detailed explanation of perlite expansion, see info sheet: "Why Perlite Works" in the Information library at www.perlite.org



Applying a textured coating

Advantages of Perlite

Perlite offers advantages to both manufacturers and applicators of textured coatings. To manufacturers, perlite provides low cost bulk filling and a white color to reduce pigmentation costs. Because perlite is light in weight, shipping and handling costs are reduced. The light weight of perlite textured coatings reduces the tendency of thick films to sag and run. As a result, applicators can apply heavier coatings in a single pass with subsequent labor savings. In addition, because perlite is inorganic and inert, it does not contribute to yellowing in industrial atmospheres. Even as a coating, applicators can benefit from perlite's unique insulating properties.

Variety of Textures Possible

Perlite is available in different grades ranging from fine to coarse material. The table below provides general guidance on textures that may be achieved with different perlite particle sizes.

PERLITE PARTICLE SIZE (TYPICAL)*	**TEXTURE**	**SPRAY TIP SIZE** (TYPICAL)
0.01 – 0.2 mm	Fine	1/8–3/16 in. (3–5 mm)
0.1 – 3.0 mm	Medium	3/16–1/4 in. (5–6.5 mm)
1.5 – 6.0 mm	Coarse	3/8–1/2 in. (8–12 mm)

**Particle size ranges are approximate and presented for guidance only.*

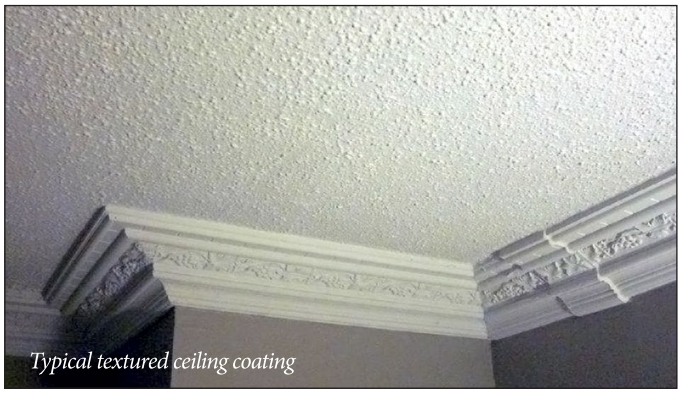
Textured Coating Formulation

On a volume basis, significant quantities of perlite may be used to produce distinctive textures. Trials should be conducted to determine the optimum amount of perlite necessary to achieve the desired texture.

Application of Perlite Textured Coatings

Textured coatings may be formulated for either spray or roller application. Heavy duty spray equipment may be used to apply perlite textured coatings. Typical tip sizes are detailed in the table, left.

When coatings are to be applied with rollers, 3/4 to 1-1/4 in. (18-30 mm) long nap rollers or a honeycomb foam roller should be used for fine and medium textures. For coarse textures, a deeply patterned roller is recommended for best results.



Typical textured ceiling coating

Aggregate Blending

Expanded perlite is a mineral aggregate and the coarser particle sizes will not withstand high shear rates during mixing. Slow speed mixing with broad paddles is recommended. Mixer horsepower requirements would be approximately 10 horsepower per 250 gallon (1000 liter) batch at mixing speeds in the range of 50-200 rpm. Formulations requiring a high level of shear should be mixed with high speed equipment prior to the addition of perlite. Provisions should be made to allow for 40% bulking while perlite is being added to the coating mix.

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