Chapter 12

Painting Contractor

Super Good Cents vapor retarder requirements may affect the painting contractor. Most building codes include similar vapor retarder requirements.

VAPOR RETARDER MAY MEAN VAPOR RETARDER PAINT

Vapor retarders in walls and ceilings help keep moisture from inside the home from diffusing into insulation cavities. In some cases, particularly for walls, faced insulation meets the vapor retarder requirement. In other cases, particularly for ceilings, the easiest way to provide the vapor retarder is to apply vapor retarder paint.

If the general contractor expects you to provide vapor retarder paint, check with your suppliers for appropriate products and costs.

Many manufacturers make drywall primer and sealers with perm ratings lower than 1. Both latex and oil base vapor retarder paints are available. Use products with tested perm ratings and follow instructions for applying proper coating thickness.

The testing standard for vapor retarder paint is ASTM E-96-72 or TAPPI specification TT4480M-84. If product literature does not indicate that an independent testing lab used these test standards to verify perm rating, the product may not function as a vapor retarder.

Many building code officials require the test lab report before they accept the paint as the vapor retarder. If you plan to use a particular product frequently, have the manufacturer supply you with a copy of the report. That way you will always be able to verify performance of the paint with general contractors, inspectors, and plan reviewers.

In some cases, codes require that vaulted ceilings have a vapor retarder with a perm rating of 0.5. (The Super Good Cents program requires a perm rating of 1 for walls, ceilings, and floors.) Relatively few vapor retarder paints have ratings that low. But two coats (or more) of the material may provide the protection you need.

Use the following formula to determine the perm rating of multiple coats of paint:

Overall perm rating = $\frac{1}{1/P_1 + 1/P_2 + ... + 1/P_n}$

Where:

P_1 = the tested perm rating of the first coat

P_2 = the tested perm rating of the second coat

n = number of coats

For Example:

Product one has a tested (in writing) perm raring of 2.5. The tested perm rating of product two is 1.6. What is the overall perm rating of product one applied over product two?

$$\text{Overall perm rating} = \frac{1}{1/2.5+1/1.6}$$

$$= \frac{1}{0.4 + 0.62}$$

$$= 0.98$$

Remember: To verify that the paint will perform as a vapor retarder, look for independent laboratory tests using ASTM E-96-72 or TAPPI specification TT4,480M-84.

DRYING HOMES WITH POLYETHYLENE VAPOR RETARDERS

Some homes have polyethylene vapor retarders in walls and ceilings. Polyethylene is such an effective vapor retarder that you may need to use fans or dehumidifiers to move moist air out of the home to dry the paint.

In homes with polyethylene in the ceiling, make sure the insulation contractor insulates the ceiling before you paint to prevent condensation at the ceiling and moisture damage to the paint job and drywall.