

# COLD WEATHER PAINTING

The best time to paint is when the weather is warm and dry, with little wind. Obviously, these kinds of days are few and far between during the Fall. As we approach the cold weather months, the hours of the day that are ideal for painting will shorten.

The latex house painting season starts after the last frost in Spring, then runs until about two weeks before the first expected frost in the Fall. Using latex too late in the Fall, or during an "Indian Summer," can cause great stress on the latex paint film. Cool temperatures during application can interfere with curing and cause coalescence problems. Poor coalescence will result in very early paint failure. Also, subjecting a latex paint film to freeze-thaw cycles during the first two weeks of cure may shorten the long-term life of the paint system. This cycling occurs when the temperatures at night dip below the freezing point causing a "thermal shocking" of the latex paint film which may lead to early embrittlement.

With this in mind, many turn to oil base finishes at this time of year. Latex painting generally has a low temperature application limit of 50° F. This temperature applies to surface, paint and air. Many make the mistake of starting a latex paint project when it hits 51° F. Unknowingly, the siding has not reached this temperature and may contribute to poor coalescence. Also, painting under similar conditions in the latter part of the day may result in wetting agent or glycol bleeding of the latex paint job later, especially when heavy, morning dews are frequent.

Oil based (solvent) finishes are more forgiving in regards to cold weather painting. These finishes cure by oxidation, not coalescence. Cold temperatures will retard oxidation, but are not detrimental to the overall curing of the system. Shake/shingle and oil house and trim finishes will still cure at temperatures as low as 20° F., whereas the lower limit for latex is 40° F.

Even though oil base finishes will tolerate lower temperatures, one still has to watch a couple of key factors. Cool temperatures, along with high humidity, can spell "condensation." Condensation can alter the curing process or change the gloss of the finished paint job, be it alkyd or latex. Temperatures around the freezing point can produce frost formation on the paint job, which can be just as damaging as condensation.

When the mercury starts to drop, be prepared to use an oil based shake/shingle or house and trim finish. Proper coating selection and a little common sense will result in a satisfactory paint job, even though the chill from the north will make it a little unpleasant during application. Application in cold weather may be a little tricky since the paint will not exhibit the same flow and leveling as it did at 70° F. At low temperatures, obtaining film build will be more difficult and brush drag will increase, Care will have to be taken to avoid runs and sags.