Tips for Interior Painting
In Cold Weather

Ignoring environmental conditions during painting operations is one of the leading causes of coatings failure (along with poor surface preparation). With summer coming to an end, most painting projects will be moving indoors as temperatures drop.

While interior projects are less likely to be affected by changes in weather, the drop in temperature can still compromise the quality of the applied coating system if proper environmental controls are not used.

Cold weather can affect the quality of interior painting projects if proper environmental controls are not used.

This article will evaluate best practices for managing the environmental conditions of a cold weather interior painting project.

Temperature

- In new construction, sometimes interior paint application commences before the building's heating system is operational. Most interior products are formulated to be applied above 50°F (10°C). If the building's heating system is not yet operating, or if the room is not heated, space heaters should be used to bring up the ambient temperature of the space before painting work commences.
- When using space heaters, it is preferable to use dry, electric or radiant heaters. Open-flame heaters can produce moisture and raise humidity when used in an enclosed space. This can cause moisture to condense on cooler surfaces which will compromise the performance of the applied coating as it cures.
- If you are painting dense substrates like structural steel or concrete, check the surface temperature before applying coatings as these substrates can take longer to heat up.

Ventilation

- When the temperature drops, people are often hesitant to open windows to prevent cold air from entering the room. Although it is important to keep surface and ambient temperatures in a suitable range for coatings application, the lack of proper ventilation creates a number of issues on its own.
- As waterborne coatings dry, moisture vapor evaporates from the coating into the air. If the interior space is not properly ventilated, this results in a sudden rise in humidity that can prevent the coating from curing properly.
- While many are aware of the health and safety risks posed from applying solvent-based coatings in poorly ventilated spaces, it may come as a surprise that a lack of proper air flow can create performance issues when applying waterborne coatings.

It is imperative to maintain these environmental conditions after coatings application and throughout the curing process. Failure to maintain these conditions before the coating has cured can result in poor film formation, which can lead to premature coatings failure.