Application Techniques:

Apply portland cement materials only when ambient and surface temperatures will remain above 40°F for at least 48 hours following application. If there is any frost present on the surface of basecoat or substrate application should not be attempted. If application is necessary during cold weather consider tenting and heating the structure for the duration of the application, and if possible for 2 or more weeks after completion.

When the application is completed make sure to moist cure portland cement materials by misting with water 2 – 3 times a day for several days after application, allowing enough time to dry prior to nightfall. Proper hydration and crystalline growth is extremely important in any cement product and should be considered especially crucial to the long-term performance of any portland cement stucco system.

Some additives will speed up the setting time of portland cement based materials but by no means are they considered an anti-freeze. These products actually give the applicator less working time and can cause efflorescence or color variations. Anti-freeze will not protect portland cement from the effects of freezing temperatures.

Conclusion:

Always protect portland cement-based materials from freezing. As water freezes it expands forming crystals. This expansion process will break the hydration cycle and destroy any growth that has already occurred, resulting in a soft powdery material that cannot be repaired and, most likely, will have to be removed. Additives will help in the initial set of the material, but will not prevent freezing. Always protect finished work from cold temperatures and possible freezing.

Portland cement based stucco finishes are a beautiful, long lasting finish that if applied correctly, will give years of service. However, it is extremely important to follow the manufacturer’s instructions and recommendations concerning application.