Policy Regarding: Cold Weather Concrete Heating Requirements

1. Introduction

The purpose of this policy is to reinforce and clarify the building departments requirements for protecting concrete placed during cold weather. Ensuring that the concrete is protected from freezing and protected for a sufficient length of time to attain the required strength for safe removal of forms and for safe loading of the structure during construction. These requirements are based on the ACI Guide to Cold Weather Concreting (ACI 306R-16).

2. Scope

This policy applies to all concrete poured during the period when the temperatures fall below freezing at night with no significant warm up during the day. The Building Official will determine when these conditions exist. Once the concrete heating requirements begin, they will stay in place until warmer seasonal temperatures as determined by the Building Official.

3. Procedure

Temperature Monitoring

- Concrete must be kept at 50° for 72 hours
- Concrete placed Monday or Tuesday will be monitored twice a day by the building department
- Concrete placed before noon on Wednesday will be monitored twice a day by the building department through Friday and provided the temperature was kept at 50° no third-party monitoring will be required for Saturday morning
- Concrete placed after noon on Wednesday will require a third-party engineer to conduct the twice daily temperature monitoring for the remainder of the 72 hours
  - The engineer will be required to provide a report noting the date, time, ambient temperature, and the concrete temperature.
- A third-party engineer will also be required if the 72 hour heating period falls on a holiday
  - The engineer will be required to provide a report noting the date, time, ambient temperature, and the concrete temperature.
- The Building Official can authorize changes to the above requirements based on specific circumstances