PART 1 - GENERAL

1.1 SECTION INCLUDES

A. Initial and final curing of horizontal and vertical concrete surfaces, excluding site work concrete.

1.2 REFERENCES

- A. ACI 318-14 Building Code Requirements for Structural Concrete.
- B. ACI 301 Structural Concrete for Buildings.
- C. ASTM C171 Sheet Materials for Curing Concrete.

1.3 QUALITY ASSURANCE

A. Perform Work in accordance with ACI 318 Section 26.5.3 and ACI 308R. Proper curing of concrete shall be the Contractor's responsibility. Improperly cured concrete in the opinion of the Architect shall be removed and replaced at no extra cost to the Owner.

1.4 DELIVERY, STORAGE, AND HANDLING

A. Deliver, store, protect and handle sheet film materials to avoid puncturing or damage of any kind.

PART 2 - PRODUCTS

2.1 MATERIALS

- A. Polyethylene Film ASTM C171; 10 mil thick, clear, manufactured from virgin resin with no scrap or additives, manufactured by Burke By Edoco, Long Beach, CA, or equal as approved in accordance with Division 01, General Requirements for Substitutions.
- B. Water: Potable and not detrimental to concrete.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Verify substrate conditions.
- B. Verify that substrate surfaces are ready to be cured.

3.2 EXECUTION - HORIZONTAL SURFACES

- A. Immediately after placement, protect concrete from premature drying, excessively hot or cold temperatures and mechanical injury.
- B. Maintain concrete with minimal moisture loss at above 50 degrees F temperature for period necessary for hydration of cement and hardening of concrete. Maintain concrete temperature below 95 degrees F. Dusting with dry cement to absorb excess water is prohibited.
- C. Cure floor surfaces only as specified herein and in accordance with Section 1905A.11 CBC. Membrane curing compound method not permitted for interior cast in place concrete slabs.
- D. Moisture Retaining Coverings: spread polyethylene film over floor slab areas, lapping edges and sides, minimum 6 inches and sealing with pressure sensitive tape; cover with plywood or otherwise protect film from damage; maintain in place for minimum of seven (7) days unless noted otherwise on drawings. Do not permit traffic over floor slabs during the seven (7) day curing period.
- E. Vertical Surfaces: fog spray water over surfaces and maintain wet for 10 days.
- F. Quality Control: Proper curing of concrete surfaces shall be the responsibility of the Contractor under this section.
- G. Flooding, sprinkling or ponding not permitted.
- 3.3 EXECUTION VERTICAL SURFACES
 - A. Spraying: Spray water over surfaces and maintain wet for 10 days.
- 3.4 PROTECTION OF FINISHED WORK
 - A. Protect finished Work from damage caused by the work of other sections.
 - B. Do not permit traffic over unprotected floor surface.

END OF SECTION 033900