Part 1 GENERAL

1.1 SECTION INCLUDES

1. Initial and final curing of horizontal and vertical concrete surfaces.

1.2 RELATED SECTIONS

1. Division 01 of this Specification.
2. Section 03 30 00 - Cast-in-place Concrete.

1.3 REFERENCES

1. AASHTO M182-05 - Burlap Cloth made from Jute or Kenaf and Cotton Mats.

2. ASTM C171-07 - Sheet Materials for Curing Concrete.

3. ASTM C309-07 - Liquid Membrane-Forming Compounds for Curing Concrete.

4. CSA-A23.1-09/A23.2-09 - Concrete Materials and Methods of Concrete Construction / Methods of Test for Concrete.

1.4 SUBMITTALS FOR REVIEW

1. Section 01 33 00: Submittals.
2. Product Data: Provide data on curing compounds, mats, paper and film compatibilities, and limitations.

1.5 QUALITY ASSURANCE

1. Perform Work in accordance with CSA-A23.1/A23.2.

1.6 DELIVERY, STORAGE, AND PROTECTION

1. Deliver curing materials in manufacturer's packaging including application instructions.

Part 2 PRODUCTS

2.1 MATERIALS

1. Sheet Materials: ASTM C171:
    1. Polyethylene Film: Minimum 0.15 mm (6 mil) thick.
    2. Burlap: AASHTO M182, class or weight suitable for use and location.
    3. Water: Potable, not detrimental to concrete.

Part 3 EXECUTION

3.1 EXAMINATION

1. Verify existing conditions before starting work.

2. Verify that substrate surfaces are ready to be cured.

3.2 EXECUTION - HORIZONTAL SURFACES

1. Cure floor surfaces in accordance with CSA-A23.1/A23.2.

2. Cure concrete using one of the following methods:

    1. Ponding: Maintain 100% coverage of water over floor slab areas, continuously for four (4) days.

    2. Spraying: Spray water over floor slab areas and maintain wet for seven (7) days.

    3. Absorptive Mat: Saturate burlap-polyethylene and place burlap-side down over floor slab areas, lapping ends and sides; maintain in place for seven (7) days.

    4. Polyethylene Film: Spread over floor slab areas, lap edges and sides, seal with pressure sensitive tape [and cover with plywood]; maintain in place for seven (7) days.

3.3 EXECUTION - VERTICAL SURFACES

1. Cure surfaces in accordance with CSA-A23.1/A23.2.

2. Spraying: Spray water over surfaces and maintain wet for seven (7) days.

3.4 PROTECTION OF FINISHED WORK

1. Protecting installed work in accordance with the contract requirements.

2. Do not permit traffic over unprotected floor surface.

End of Section 03 39 00