tend to impair the quality of the freshly mixed or hardened concrete:

a) High ambient temperature.
b) High concrete temperature.
c) Low relative humidity.
d) Wind velocity.
e) Solar radiation.

2. When the rate of evaporation of surface moisture from concrete is expected to approach 1 kg/m²/hr (using Fig. 2.1.5 in ACI 305R-91) or when the shade air temperature is 35ºC and rising, precautions shall be taken, including the following:

a) Dampening the forms.
b) Reducing the concrete temperature to the lowest practical level by procedures such as: shading the aggregate; cooling the mixing water before use and screening the mixing plant and transporting vehicles from wind, rain and sun.
c) Erecting wind breaks and sunshades at the concrete placing location.
d) Reducing the time between the placing of the concrete and the start of curing to the minimum possible.
e) Minimising evaporation (particularly during the first few hours subsequent to placing the concrete) by suitable means such as applying moisture by fog spraying or use of evaporation retarders.

3. All precautions to be taken shall be subject to the Engineer's approval and the Contractor shall demonstrate that all approved precautions are available for use prior to the Engineer granting approval to any concreting operations.

4. In the event that conditions become such that these requirements cannot be met, concreting shall be suspended immediately and not resumed until the requirements can be met again. Under such circumstances, additional precautions shall be taken to avoid the hot weather concreting conditions being exceeded on future pours.

G. Control of Temperature

1. The temperature of the concrete when placed shall not exceed 32ºC nor shall concrete be mixed or placed when the shade air temperature is 40ºC or above, or is expected to reach such a level during concreting and 3 hours after placing, without special permission from the Engineer.

2. For all concrete sections the Contractor shall take precautions to limit the effects of heat of hydration.