

# GENERAL NOTES

## ITEM SPECIAL – PATCHING CONCRETE BRIDGE DECK OVERLAYS (CONTINUED)

NO TRAFFIC SHALL BE PERMITTED ON THE PATCHES UNTIL THE 24 HOUR WATER CURE IS COMPLETED AND THE 3000 PSI STRENGTH IS OBTAINED. THE TEMPERATURE AT THE PATCH SURFACE SHALL BE MAINTAINED ABOVE 35 DEGREES F UNTIL THE CURING PERIOD IS COMPLETED.

FIGURE 1 AS SHOWN ON THIS SHEET SHALL BE USED TO DETERMINE GRAPHICALLY THE LOSS OF SURFACE MOISTURE FOR THE PATCHES. IN NO CASE SHALL THE TEMPERATURE OF THE MSMC EXCEED 90 DEGREES FAHRENHEIT DURING PLACEMENT. IF RAIN OCCURS DURING PLACING OF THE MATERIAL, ALL OPERATIONS SHALL CEASE. NO MSMC PATCHES SHALL BE PLACED AFTER OCTOBER 31ST EXCEPT BY SPECIFIC PERMISSION OF THE DIRECTOR.

DURING DELAYS IN THE PATCH PLACEMENT OPERATIONS OF MORE THAN 10 MINUTES THE WORK FACE OF THE PLACED PATCH MATERIAL AND ANY BONDING GROUTED AREAS SHALL BE TEMPORARILY COVERED WITH WET BURLAP. IF AN EXCESSIVE DELAY IS ANTICIPATED, A BULKHEAD SHALL BE INSTALLED AT THE WORK FACE AND THE OVERLAY PLACEMENT OPERATION TERMINATED.

UNLESS OTHERWISE AUTHORIZED BY THE ENGINEER, PATCH SHALL NOT BE PLACED ADJACENT TO A PREVIOUS PATCH WHICH HAS CURED FOR LESS THAN 24 HOURS.

ADEQUATE PRECAUTIONS SHALL BE TAKEN TO PROTECT THE FRESHLY PLACED MSMC FROM RAIN.

PLACING. IF PLACEMENT OF THE PATCHES IS TO BE MADE AT NIGHT, THE CONTRACTOR SHALL SUBMIT A PLAN WHICH PROVIDES ADEQUATE LIGHTING FOR WORK AREA. THE PLAN SHALL BE SUBMITTED AT LEAST 15 CALENDAR DAYS IN ADVANCE AND BE APPROVED BY THE ENGINEER BEFORE CONCRETE IS PLACED. THE LIGHTS SHALL BE SO DIRECTED THAT THEY DO NOT AFFECT OR DISTRACT APPROACHING TRAFFIC.

THE PATCHING MATERIAL SHALL BE PLACED, CONSOLIDATED AND FINISHED TO THE EXISTING GRADE AND ELEVATION, PATCHES EXCEEDING 50 S.F. SHALL BE LEVELED AND CONSOLIDATED WITH A MECHANICAL VIBRATING SCREED. SMALLER PATCHES SHALL BE HAND VIBRATED AND LEVELED WITH A TEN FOOT STRAIGHTEDGE. ANY IRREGULARITIES IN THE PATCHES EXCEEDING 1/8 INCH IN 10 FEET SHALL BE CORRECTED IMMEDIATELY.

FINISHING. AFTER THE PATCHES HAVE BEEN CONSOLIDATED AND FINISHED THEY SHALL BE TEXTURED IN ACCORDANCE TO SECTION 451.09 OF THE CMS.

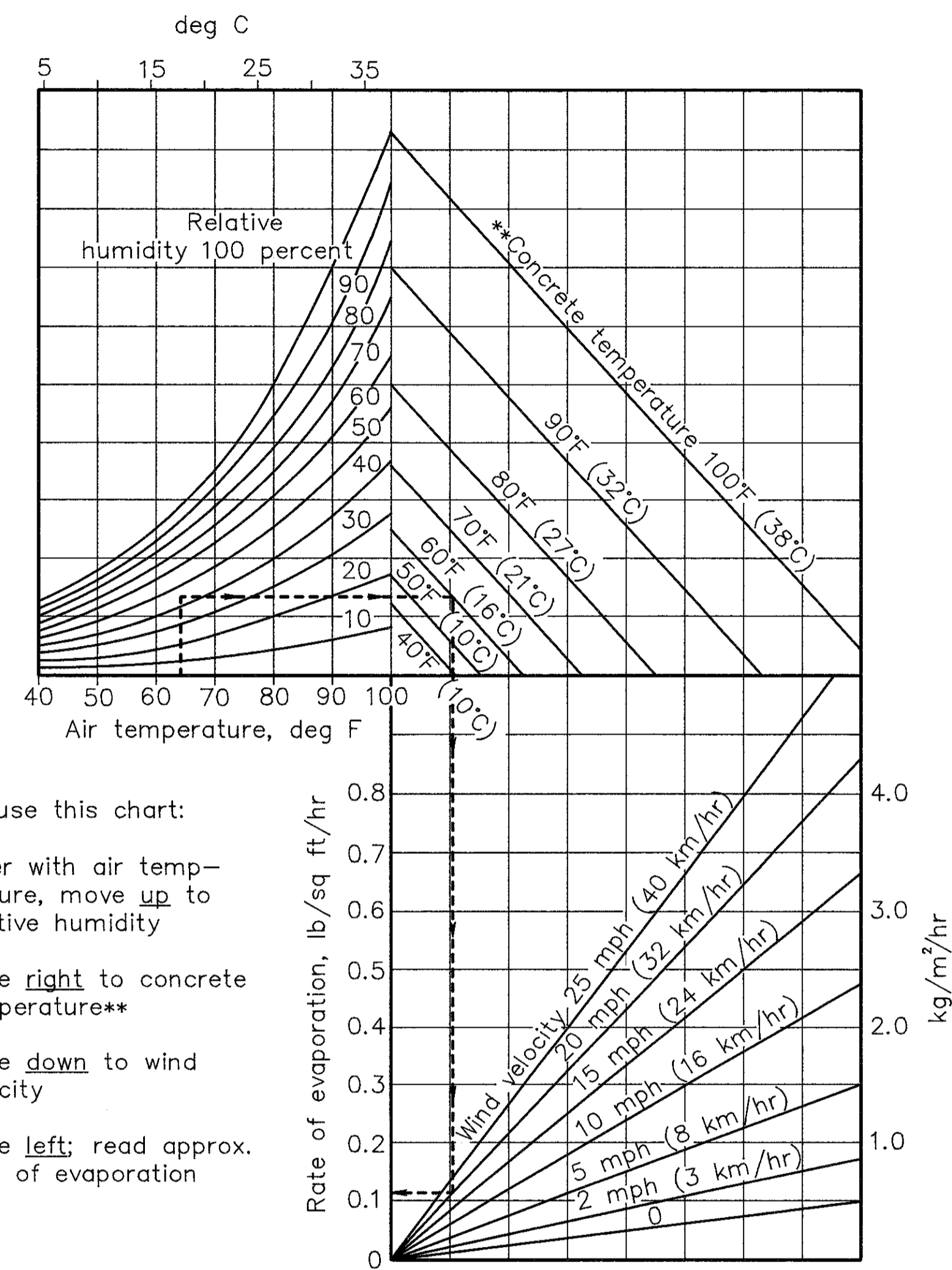
INSPECTION, SOUNDING AND REPAIR OF CONCRETE PATCHES. AFTER CURING AND BEFORE FINAL ACCEPTANCE, ALL PATCHED AREAS SHALL BE INSPECTED AND SOUNDED. ALL DELAMINATED AREAS SHALL BE REMOVED AND REPATCHED ACCORDING TO THIS NOTE.

ALL SOUNDING, REPLACEMENT OF REJECTED AREAS AND SEALING NOT PAID FOR SEPARATELY WILL BE THE RESPONSIBILITY OF THE CONTRACTOR AND INCLUDED IN THE UNIT PRICE BID FOR THIS ITEM.

METHOD OF MEASUREMENT. THE QUANTITY SHALL BE THE ACTUAL AREA IN SQUARE YARDS OF THE EXPOSED SURFACE OF ALL PATCHES, IRRESPECTIVE OF THE DEPTH OF PATCH, IN PLACE AND ACCEPTED.

BASIS OF PAYMENT. PAYMENT SHALL BE MADE AT THE CONTRACT PRICE BID FOR

ITEM	UNIT	DESCRIPTION
SPECIAL	SQ. YD.	PATCHING CONCRETE BRIDGE DECK OVERLAYS



- To use this chart:
1. Enter with air temperature, move up to relative humidity
  2. Move right to concrete temperature\*\*
  3. Move down to wind velocity
  4. Move left; read approx. rate of evaporation

Figure 1\*: Effect of concrete and air temperatures, relative humidity, and wind velocity on the rate of evaporation of surface moisture from concrete. This chart provides a graphic method of estimating the loss of surface moisture for various weather conditions. To use this chart, follow the four steps outlined above.

\*ACI Committee 308, "Standard Practice for Curing Concrete (ACI 308-81)", American Concrete Institute, Detroit, 1984, 11 pp.

\*\*In using this figure, the concrete temperature shall be taken as the average of the deck surface temperature and the plastic concrete temperature.

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<b>STRUCTURE</b> <b>GENERAL NOTES</b> LAK-90/271-1.88/0.00						
LAKE COUNTY						
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
W.M.	R.T.P.		V.S.	G.W.M.	2/22/92	