

DEGREE OF EXPOSURE TO FREEZE-THAW	NORMAL CONCRETE**	HIGH-EARLY-STRENGTH CONCRETE***
NO EXPOSURE	2 DAYS	1 DAYS
ANY EXPOSURE	3 DAYS	2 DAYS

LINE	CURING CONDITION	THIN SECTIONS	MODERATE SECTIONS	MASSIVE SECTIONS
1	MIN. TEMP. FRESH CONCRETE, °F	55	50	45
	a) MAX. ALLOWABLE GRADUAL DROP IN TEMP. THROUGHOUT FIRST 24 HOURS AFTER END OF PROTECTION, °F	50	40	30
	b) MAX. ALLOWABLE TEMP. DROP IN ANY 1 HR, °F	5	4	3

\*\*MADE WITH TYPE I OR TYPE II PORTLAND CEMENT.

\*\*\*MADE WITH TYPE III OR HIGH-EARLY-STRENGTH CEMENT, OR ACCELERATOR, OR AN EXTRA 100lb. OF CEMENT.

C					
B					
A					
	DESCRIPTION	DRW	CKD	APP	DATE
REVISIONS					
DRAWN BY: S.D.A.					
CHECKED BY: S.D.A.					
APPROVED:					

**DURATION OF PROTECTION FOR CONCRETE PLACED IN COLD WEATHER**

SCALE: NONE

CITY OF DETROIT  
WATER AND SEWERAGE  
DEPARTMENT  
ENGINEERING  
DIVISION

SHEET 1 OF 1

DWG No. 03800-01