

### ONTARIO BUILDING CODE

#### 9.3.1. Concrete

##### 9.3.1.1. General

(1) Except as provided in Sentence (2), unreinforced and nominally reinforced concrete shall be designed, mixed, placed, cured and tested in accordance with the requirements for “R” class concrete stated in Clause 8.13 of CSA A23.1, “Concrete Materials and Methods or Concrete Construction.

(b) 0.65 for interior floors other than those for garages and carports, and

(c) 0.70 for all other applications.

##### 9.3.1.2. Cement

(1) Cement shall meet the requirements of CAN/CSA-A3001, “Cementitious Materials for Use in Concrete”.

#### OBJECTIVE

The slump test used to determine the acceptability of concrete mixes has been replaced by the ratio of water to cementing materials (cement, fine aggregate, coarse aggregate). The required values of concrete mixes are shown in Table 9.3.1.7. of the Building Code.

##### 9.3.1.7. Concrete Mixes

(1) For site-batched concrete, the concrete mixes described in Table 9.3.1.7. shall be considered acceptable if the ratio of water to cementing materials does not exceed,

(a) 0.45 for garage floors, carport floors and all exterior flatwork,

Manufacturers and builders are required to mix concrete according to the values indicated on the table and shall not be altered at the time of placement. Where necessary, the building inspector may request verification of the correctness of concrete mixes as they apply to the appropriate applications. The inspector may request a copy of the mixed batch card on site or ordering a third party evaluation test.

**TABLE 9.3.1.7.**

MAXIMUM SIZE OF COURSE AGGREGATE MM (IN)	MATERIALS, VOLUME					
	CEMENT		FINE AGGREGATE (DAMP AVERAGE COURSE SAND)		COURSE AGGREGATE (GRAVEL OR CRUSHED STONE)	
	PARTS	L	PARTS	L	PARTS	L
14 (½)	1	28	1.75	49	2	56
20 (¾)	1	28	1.75	49	2.5	70
28 (1⅛)	1	28	2	56	3	84
40 (1½)	1	28	2	56	3.5	98