

(1053)

**STANDARDS FOR CEMENT
CONSUMPTION FOR DIFFERENT
ITEMS OF WORK**

Government of Gujarat
Roads & Building Department,
Circular No. PRC/10/2017/Cement Consumption/16/C
14, Sardar Bhavan, 2nd Floor,
Sachivalaya, Gandhinagar
Date:- 11/05/2017

Read:- Government of Gujarat, Road & Building Department, Sachivalaya, Gandhinagar Circular
No. SOR/1085/7/H(1) dated 08/12/1986

CIRCULAR

The uniform rate of cement consumption for various item was prepared and circulated vide
No. SOR/1085/7/H(1) dated 08/12/1986.

At the outset, current practice of estimating cement consumption in concrete item of
various Building, Bridge and Road project is based on above circular. However, it is generally
observed that the cement consumption derived by actual mix design is lower than the standard
cement consumption. Some of provision of the said circular become obsolete due to subsequent
revisions in the relevant IS code and IRC code. The maximum cement consumption as per IS :
456-2000 and IRC : 112-2011 is 450 Kg./m³. Also cement industry and aggregate crushing
industry have involved better quality of cement and aggregate over the years which have far
reacting impact on mix design of the present day concrete.

Mix design report of GERI reflecting entire Gujarat region have been considered in
averaging the cement consumption in various grade of design mix concrete. To minimize the
difference between standard cement consumption of cement and actual consumption derived by
mix design by GERI and the cement consumption as per provision of IS and IRC code falling
cement consumption is proposed for estimation purpose.

Looking the above facts, the cement consumption mentioned in circular vide No
SOR/1085/7/H(1) dated 08/12/1986 is required to modify as per below:

Sl. No.	1
Ref. No.	SOR/1085/7/H(1)
Date	08/12/1986
By	N
For	
PA.	
A.O.S.	2
Remarks	TC
	380
	20/4/99

EXISTING ITEM			AMENDMENT		
Item	Unit	Quantity of cement to be used per unit quantity of work in Kg	Item	Unit	Quantity of cement to be used per unit quantity of work in Kg.
Building, Road & Bridge Items					
Providing & casting in situ ordinary cement concrete M75 for PCC work	Cu.m.	160	Providing & casting in situ ordinary cement concrete M7.5 for PCC work	Cu.m.	160
Providing & casting in situ ordinary cement concrete M100 for PCC work	Cu.m.	220	Providing & casting in situ ordinary cement concrete M10 for PCC work	Cu.m.	220
Providing & casting in situ ordinary cement concrete M150 for PCC work	Cu.m.	320	Providing & casting in situ ordinary cement concrete M15 for PCC work	Cu.m.	290
Providing and casting situ control cement concrete M200 for RCC work	Cu.m	400	Providing and casting situ control cement concrete M20 for RCC work	Cu.m.	360
Providing and casting situ control cement concrete M250 for RCC work	Cu.m.	450	Providing and casting situ control cement concrete M25 for RCC work	Cu.m.	380
Providing and casting situ control cement concrete M350 for RCC work	Cu.m.	500	Providing and casting situ control cement concrete M35 for RCC work	Cu.m.	425
Providing and casting situ control cement concrete M400 for RCC work	Cu.m.	525	Providing and casting situ control cement concrete M40 for RCC work	Cu.m.	440
Providing and casting situ control cement concrete M450 for RCC work	Cu.m.	540	Providing and casting situ control cement concrete M45 for RCC work	Cu.m.	450
New Item					
-	-	-	Providing and casting situ control cement concrete M30 for RCC work	Cu.m.	410

The cement consumption of other than above concrete item and other details mentioned in circular vide No. SOR/1085/7/H(1) dated 08/12/1986 will be remain same.



(N.G. Parmar)
Officer on Special Duty (S.P.)
R&B Department
Gandhinagar

To,

- 1) The Personal Secretary, Office of the Secretary, Road & Building Department, Sachivalaya, Gandhinagar
- 2) The Personal Secretary, Office of the Secretary, Narmada, Water Resources, Water Supply and Kalpsar Department, Sachivalaya, Gandhinagar
- 3) The Personal Secretary, Office of the Principal Secretary, Health & Family Welfare Department, Sachivalaya, Gandhinagar
- 4) The Personal Secretary, Office of the Additional Chief Secretary, Urban Development and Urban Housing Department, Sachivalaya, Gandhinagar
- 5) The Personal Secretary, Office of the Principal Secretary, Panchayat, Rural Housing and Rural Development Department, Sachivalaya, Gandhinagar
- 6) Accountant General, Rajkot/Ahmedabad
- 7) All the Chief Engineers, Road & Building Department, Sachivalaya, Gandhinagar
- 8) All the Chief Engineers, Narmada, Water Resources, Water Supply and Kalpsar Department, Sachivalaya, Gandhinagar
- 9) The Managing Director, Gujarat State Road Development Corporation, Nirman Bhavan, Gandhinagar
- 10) The Chief Engineer & Director, Staff Training College, Gandhinagar
- 11) The Director, Gujarat Engineering Research Institute (GERI), Vadodara
- 12) The Under Secretary, Gujarat Vigilance Commission, Vigilance Bhavan, Gandhinagar
- 13) All the Superintending Engineers, Road & Building Department (State, Panchayat, National Highway, Capital Project Circle, Electric Circle)
- 14) All the Executive Engineers, (as above circles)
- 15) All Technical Officers, Road & Building Department, Sachivalaya, Gandhinagar
- 16) All Technical Branches, Road & Building Department, Sachivalaya, Gandhinagar
- 17) President, Gujarat Contractors Association, Gajjara Hall, Law Garden, Law College Road, Ahmedabad
- 18) Branch Select file-2017

No. G. 4.1 T. 1 1624

22-5-17

- Copy of Confirmation to,

Ex. Engr. City, N. P. M., Medical, Store, G. 1. 1.

(R&B) Division for Information & R. B.

K. V. Rathod
Office Superintending
A'bad. City (R. & B.) Circle
Ahmedabad