

BD/F : REINFORCED CEMENT CONCRETE

Sr. No. in Rs. Item Description of Items Unit Complete

Note :All R.C.C. items of M-30/35/40 are based on assumption of cement content of 400/425/450 kg/m³ respectively. However actual cement consumption shall be as per Mix design confirming conditions of IS 456/2000. It may be ensured that cement content of Mix design shall be economical and within limit as prescribed in the IS 456/2000 (Table 5 at page-20 and Clause 8.2.4.2). This aspect may be noted and necessary condition be mentioned in the specification/tender paper.

1 Providing and casting in situ cement concrete of trap metal for R.C.C. pile caps as per detailed designs and drawings including bailing out water manually, centering, formwork, compacting, finishing and curing. (Excluding steel reinforcement)

- a) M-20 Cum. Rs3346.00 (Cement 7.20 bags per Cum.)
- b) M-25 Cum. Rs3434.00 (Cement 7.60 bags per Cum.)
- c) M-30 Cum. Rs3445.00 (Cement 8.00 bags per Cum.)
- d) M-35 Cum. Rs3510.00 (Cement 8.50 bags per Cum.)
- e) M-40 Cum. Rs3575.00 (Cement 9.00 bags per Cum.)

2 Providing and casting in situ cement concrete of trap metal for R.C.C. work in foundation like raft, strip, foundation grillage, and footing of R.C.C. Columns and steel stanchions including bailing out water manually, centering, formwork, compacting, finishing and curing. (Excluding mild steel reinforcement and structural steel).

- a) M-20 Cum. Rs3346.00 (Cement 7.20 bags per Cum.)
- b) M-25 Cum. Rs3434.00 (Cement 7.60 bags per Cum.)
- c) M-30 Cum. Rs3445.00 (Cement 8.00 bags per Cum.)
- d) M-35 Cum. Rs3510.00 (Cement 8.50 bags per Cum.)
- e) M-40 Cum. Rs3575.00 (Cement 9.00 bags per Cum.)

Sr. No. & Item Code	Description of Items	Unit	(in Rs. Complete
3	Providing and casting in situ cement concrete of trap metal for R.C.C. columns as per detailed designs and drawings or as directed including centering, formwork, compacting, finishing the formed surfaces with cement mortar 1:3 of sufficient minimum thickness to give a smooth and even surface or roughening the surface if special finish is to be provided and curing. (Excluding mild steel reinforcement)	Cum.	
a)	M-20 (Cement 7.20 bags per Cum.)		

- b) M-25 (Cement 7.60 bags per Cum.) Cum.
- c) M-30 (Cement 8.00 bags per Cum.) Cum.
- d) M-35 (Cement 8.50 bags per Cum.) Cum.
- e) M-40 (Cement 9.00 bags per Cum.) Cum.

4 Providing and casting in situ cement concrete of trap metal for R.C.C. Beams and Lintels as per detailed designs and drawings or as directed including dewatering centering, formwork, compacting, finishing the formed surface with cement mortar 1:3 of sufficient minimum thickness to give a smooth and even surface or roughening the surface if special finish is to be provided and curing. (Excluding steel reinforcement)

- a) M-20 (Cement 7.20 bags per Cum.) Cum.
- b) M-25 (Cement 7.60 bags per Cum.) Cum.
- c) M-30 (Cement 8.00 bags per Cum.) Cum.
- d) M-35 (Cement 8.50 bags per Cum.) Cum.
- e) M-40 (Cement 9.00 bags per Cum.) Cum.

Sr. No. & Item Code	Description of Items	Unit	in Rs.Complete
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5 Providing and casting in situ cement concrete of trap metal for R.C.C. Slabs and landings upto and inclusive of 10 cm thickness as per detailed drawings and designs including centering, formwork, compacting, finishing the formed surfaces with cement mortar 1:3 of sufficient minimum thickness to give a smooth and even surface or roughening the surface if special finish is to be provided and curing. (Excluding steel reinforcement)

- a) M-20 (Cement 7.20 bags per Cum.) Cum.
- b) M-25 (Cement 7.60 bags per Cum.) Cum.

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| c) | M-30 (Cement 8.00 bags per Cum.) | Cum. |
| d) | M-35 (Cement 8.50 bags per Cum.) | Cum. |
| e) | M-40 (Cement 9.00 bags per Cum.) | Cum. |

6)

Providing and casting in situ cement concrete of trap metal for R.C.C. Slab and landings above 10 cm thickness and upto and inclusive of 12.5 cm thickness as per detailed drawings and designs including centering, formwork, compacting, finishing the formed surfaces with cement mortar 1:3 of sufficient minimum thickness to give a smooth and even surface or roughening the surface if special finish is to be provided and curing. (Excluding steel reinforcement)

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|----|----------------------------------|------|
| a) | M-20 (Cement 7.20 bags per Cum.) | Cum. |
| b) | M-25 (Cement 7.60 bags per Cum.) | Cum. |
| c) | M-30 (Cement 8.00 bags per Cum.) | Cum. |
| d) | M-35 (Cement 8.50 bags per Cum.) | Cum. |
| e) | M-40 (Cement 9.00 bags per Cum.) | Cum. |

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Sr. No. & Item Code	Description of Items	Unit	in Rs. Complete
7	Providing and casting in situ cement concrete of trap metal for R.C.C. Slabs and landings above 12.5 cm thickness and upto and inclusive of 15 cm thickness as per detailed drawings and designs including centering, formwork, compacting, finishing the formed surface with cement mortar 1:3 of sufficient minimum thickness to give a smooth and even surface or roughening the surface if special finish is to be provided and curing. (Excluding steel reinforcement)		
a)	M-20 (Cement 7.20 bags per Cum.)	Cum.	

b)	M-25 (Cement 7.60 bags per Cum.)	Cum.
c)	M-30 (Cement 8.00 bags per Cum.)	Cum.
d)	M-35 (Cement 8.50 bags per Cum.)	Cum.
e)	M-40 (Cement 9.00 bags per Cum.)	Cum.

8 Providing and casting in situ cement concrete of trap metal for R.C.C. Slabs and landings above 15 cm thickness as per detailed drawings and designs including centering, formwork, compacting, finishing the formed surface with cement mortar 1:3 of sufficient minimum thickness to give a smooth and even surface or roughening the surface if special finish is to be provided and curing. (Excluding steel reinforcement)

a)	M-20 (Cement 7.20 bags per Cum.)	Cum.
b)	M-25 (Cement 7.60 bags per Cum.)	Cum.
c)	M-30 (Cement 8.00 bags per Cum.)	Cum.
d)	M-35 (Cement 8.50 bags per Cum.)	Cum.
e)	M-40 (Cement 9.00 bags per Cum.)	Cum.

Sr. No. & Item Code	Description of Items	Unit	in Rs. Complete
9	Providing and casting in situ cement concrete of trap metal for R.C.C. chajja as per detailed drawings and designs including centering, formwork, compacting, finishing the formed surface with cement mortar 1:3 of sufficient minimum thickness to give a smooth and even surface or roughening the surface if special finish is to be provided and curing. (Excluding steel reinforcement)		
a)	M-20 (Cement 7.20 bags per Cum.)	Cum.	

- b) M-25 (Cement 7.60 bags per Cum.) Cum.
- c) M-30 (Cement 8.00 bags per Cum.) Cum.
- d) M-35 (Cement 8.50 bags per Cum.) Cum.
- e) M-40 (Cement 9.00 bags per Cum.) Cum.

10 Providing and casting in situ cement concrete
 of trap metal for R.C.C. canopy as per
 detailed drawings and designs including
 centering, formwork, compacting, all special
 finishes and ornamental work and curing.
 (Excluding mild steel reinforcement)

- a) M-20 (Cement 7.20 bags per Cum.) Cum.
- b) M-25 (Cement 7.60 bags per Cum.) Cum.
- c) M-30 (Cement 8.00 bags per Cum.) Cum.
- d) M-35 (Cement 8.50 bags per Cum.) Cum.
- e) M-40 (Cement 9.00 bags per Cum.) Cum.

Sr. No. & Item Code	Description of Items	Unit	in Rs. Complete
11	Providing and casting in situ cement concrete of trap metal for R.C.C. pardi 75 mm thick including centering, formwork, compacting, finishing the formed surface with cement mortar 1:3 of sufficient minimum thickness to give a smooth and even surface or roughening the surface if special finish is to be provided and curing. (Excluding steel reinforcement)		
a)	M-20 (Cement 7.20 bags per Cum.)	Cum.	

- b) M-25 (Cement 7.60 bags per Cum.) Cum.
- c) M-30 (Cement 8.00 bags per Cum.) Cum.
- d) M-35 (Cement 8.50 bags per Cum.) Cum.
- e) M-40 (Cement 9.00 bags per Cum.) Cum.

12) Providing and casting in situ cement concrete of trap metal for R.C.C. waist slabs, steps and parapet as per detailed drawings for staircases including centering, formwork, compacting, finishing the formed surface with cement mortar 1:3 of sufficient minimum thickness to give a smooth and even surface or roughening the surface if special finish is to be provided and curing. (Excluding steel reinforcement)

- a) M-20 (Cement 7.20 bags per Cum.) Cum.
- b) M-25 (Cement 7.60 bags per Cum.) Cum.
- c) M-30 (Cement 8.00 bags per Cum.) Cum.
- d) M-35 (Cement 8.50 bags per Cum.) Cum.
- e) M-40 (Cement 9.00 bags per Cum.) Cum.

Sr. No. & Item Code	Description of Items	Unit	in Rs. Complete
13	Providing and casting in situ cement concrete of trap metal for R.C.C fins 65 mm thick in position as shown in drawings or as directed by Engineer including centering, formwork, compacting, finishing the formed surface with cement mortar 1:3 of sufficient minimum thickness to give a smooth and even surface or roughening the surface if special finish is to be provided and curing (Excluding steel reinforcement)		
a)	M-20 (Cement 7.20 bags per Cum.)	Cum.	

- b) M-25 (Cement 7.60 bags per Cum.) Cum.
- c) M-30 (Cement 8.00 bags per Cum.) Cum.
- d) M-35 (Cement 8.50 bags per Cum.) Cum.
- e) M-40 (Cement 9.00 bags per Cum.) Cum.

14 Providing and fixing in position of various diameters for R.C.C. pile caps, footings, foundations, slabs, beams, columns, canopies, staircases, newels, chajjas, lintels, pardies, coping, fins, arches, etc. as per detailed designs, drawings and schedules including cutting, bending, hooking the bars, binding with wires or tack welding and supporting as required complete.

- a) Mild Steel bar reinforcement /Tor Steel bar reinforcement M.T.
- b) T.M.T. bar reinforcement (Item No. 14(b) should be executed with prior approval by C.E. Mumbai Region) M.T.

Sr. No. & Item Code	Description of Items	Unit	in Rs) Complete
15	Providing and applying Anti corrosive treatment to mild steel and Tor steel reinforcement as per cement polymer composite coating (C.P.C.C.) method developed by C.E.C.R.I. including cleaning the bar by means of any established mechanical or manual method for removing rust and deleterious material, applying rapid setting primer and cement polymer sealing coat of approved and licensed by CECRI including redoing the process if damage accrued during handling, stacking etc. complete. (With prior approval of SEMC) Spec : (As directed by Engineer in Charge)	M.T.	
16	Providing and fixing in position after hoisting precast 1:2 cement mortar reinforced jali 50 mm thick of approved design in cement mortar 1:3 and curing complete. (including 6 mm dia. mild steel bar reinforcement) (Cement 0.06 bags per Sqm.)	Sqm.	

17	Providing and laying 50 mm thick layer in cement mortar 1:8 below plinth beam including floating, watering, curing and levelling and ramming the bed if necessary before laying the layer etc.	Sqm.
Spec :	(Cement 0.18 bags per Sqm.) (As directed by Engineer in Charge)	
18	Providing and placing plastic cover blocks of required size at 1.50 metres centre to centre near the edge of each side and at centre when the width is more than 75 cm to reinforcement to give a clear cover of 40 mm to 65 mm from all sides in R.C.C. columns.	Cum.
Spec :	(As directed by Engineer in Charge)	
19	Providing and placing plastic cover blocks of required size at the rate of 27 Nos. per 10 Square Metre to reinforcement to give a clear cover of 15 mm in R.C.C. slabs.	Cum.
Spec :	(As directed by Engineer in Charge)	
20	Providing and placing in position plastic cover blocks of required size at 90 cm centre to centre to each main bottom bars and to stirrups at sides to give required clear cover from all sides in R.C.C. beams.	Cum.
Spec :	(As directed by Engineer in Charge)	

Sr. No. & Item Code	Description of Items	Unit	in Rs. Complete
21	Providing and casting in situ R.C.C. reservoir at terrace level as per approved detailed designs and drawings including steel reinforcement, bottom slab, side walls, inner compartment wall, haunches and inner beam if any, in cement concrete M-20 and cover slab in cement concrete M-15 including centering, formwork, using waterproofing compound at the rate of 1 kg per bag of cement, cast iron round manhole cover of 45 cm diameter or of larger diameter if specified for each compartment with locking arrangement, galvanised iron inlet and outlet connection pipes of required diameter, scour pipes with plug, overflow pipes conforming to B.M.C. requirement, finishing the inside surface in cement mortar 1:3 plaster with waterproofing compound at rate of 1 kg per bag of cement and		

neat cement finish and sand faced plaster in cement mortar 1:4 from outside, watering and curing etc. excluding provision of ball cock for consolidated capacity excluding free board of 15 cm at top and 5 cm dead storage height in between bottom slab and invert of outlet pipe. (Rate for Block Estimate purpose only)

Spec : (As directed by Engineer in Charge)

a) upto 5000 litres

Litre

b) above 5000 litres

Litre

22 Dismantling R.C.C. Work including breaking concrete by chiseling, wedging etc., cutting the reinforcement, stacking the serviceable materials and stacking the debris upto a distance of 50 metres or spreading etc. complete.

Cum.

Spec : (As directed by Engineer in Charge)

23 Dismantling plain cement concrete work including breaking concrete by chiseling, wedging etc., stacking the serviceable materials and stacking the debris upto a distance of 50 metres or spreading etc. complete.

Cum.

Spec : (As directed by Engineer in Charge)