



Letters to the Editor

Design and construction of heavily loaded, large-span RC portal

This has reference to the paper titled "Design and construction of heavily loaded, huge span RC portal" by Vijay N. Bhise published in *The Indian Concrete Journal*, Vol 76, No 7, pp. 402-404.

I was very much interested to read the above article on construction project. I must congratulate the author for writing this paper. However, there are certain vital information missing in this paper. I would request the author to furnish the same.

(i) It has been indicated that the column section was kept 2400 mm at knee and tapered to 900 mm at foundation level. The dimension of the column in the other direction is not indicated anywhere.

The office block is of size 29 m x 12 m, marginally projecting out of the portal. As the portal spacing is 3 m on centres, and others are only 4 portals, the office block should project out from the outer portals, substantially. Is it so ?

(iii) For M30 concrete cement content has been given as 400 kg/m^3 , but the cement content for M 40 concrete adopted for the knee portion has not been indicated.

(iv) In the details of the knee, a cross section would have helped more to appreciate the congestion in all directions.

I thank the author once again for writing this paper.

D. Srinivasan
Secretary General,
Indian Concrete Institute
79, Third Main Road, Gandhi Nagar
Chennai 600 090.

The author replies:

Thank you very much for your appreciation of my paper. With reference to your queries I am replying as under.

(i) The dimension of the portal column in the other direction is 800 mm.

(ii) The office block projects about 1.1 m from the face of the portal beam, that is, $[(12\text{m} - 3 \times 3 - 0.8) / 2 = 1.1]$.

(iii) For M-40 grade concrete also the cement content was 400 kg/m^3 . The w/c ratio adopted was 0.35 and a slump of 75 mm was obtained with the help of a superplasticiser.

(iv) The congestion of the reinforcement was mainly at the top and bottom. However, since reinforcement was not lapped but welded, sufficient spacing was available between the bars. 40 mm needle vibrators were inserted from the sides to ensure proper compaction.

Mr Vijay N Bhise
Vijay Bhise & Associates
208, Tirupati Udyog, I B Patel Road
Goregaon (East)
Mumbai 400 063.

