

NORTHERN RAILWAY

Headquarters Office,  
Baroda House,  
New Delhi.

No. 74-W/0/Pt. XXVIII/WA

Dated:- -05-2015.

Sr. Divisional Engineer (Co-ord.),  
Northern Railway,  
DLI, FZR, LKO, MB & UMB.

Sub:- JPO on Concealed electrical/telecom wiring, location of switch boards/  
points for lights and fan etc. its plan and execution in buildings including  
composite Tender.

Ref:- This office letter of even No. dated 09/10.04.2015.

CORRIGENDUM

In part suppression to this office letter of even No. 09/10.04.2015 please read  
the Pr. CE circular No.620 instead of CE's Circular No. 281.

All other terms & conditions of above noted letter shall remain un-altered.

  
(Brij Bhan) 27/5/15  
Dy. Chief Engineer (Genl.)

Copy to :

- i) Secy to GM for kind information of GM.
- ii) PCE/NR, CEE/NR, CSE/R for kind information.
- iii) All PHODs and CAO/C/K.Gate, Delhi.
- iv) DRMs, DLI, FZR, LKO, MB & UMB.
- v) All HODs & Dy. HODs of concerned Deptt.
- vi) All Sr. DEN/Cs/NR, All Sr. DSTES/N.Rly.
- vii) All EDUs of Engg. Deptt.

उत्तर रेलवे,  
Northern Railway

प्रधान कार्यालय/Headquarters Office  
बड़ौदा हाऊस/Baroda House,  
नई दिल्ली/New Delhi.

**CE'S CIRCULAR NO.- 281**

**Sub: JPO on Concealed electrical/telecom wiring, location of switch boards/points for lights and fan etc. its plan and execution in buildings including composite Tender.**

Concealed wiring gives a neat installation as cables are hidden.

In all new Buildings/Renovation works the wiring should be concealed which means that the cables go in conduits inside the walls and across the ceiling. These conduits must be put up before roof casting as well as plastering of the walls. The conduits must go through wall and roof in straight lines. The cable should be pulled through the conduit by means of steel/nylon/fish wire.

However, a concealed wiring system will be difficult to install once the slab is cast or wall is plastered and finished.

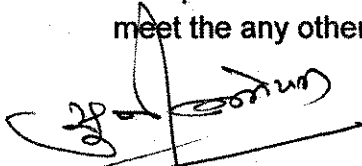
To avoid this following should be adhered to :

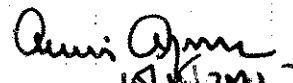
- 1) Electric wiring diagram must give full information about the concealed electric installation. It must show different circuits that go from the fuse box to all outlets like switches, sockets, power points, fan, light etc. The diagram must provide accurate information about the required dimension of cables according to the amount of current they will carry.
- 2) Location of switches, points for lights/fans and other utilities as applicable shall also be part of such drawings conforming to furniture layouts etc. in terms of C.S. No. 10 of IRWM. It must show the location including height from floor and side of all fittings including switch board etc.
- 2.1 Electric wiring diagram shall be marked on Engineering drawing (with furniture layout drawn) by Electrical department which shall be conform to IE Rules. Engg. Department shall, submit copy of detailed drawing to Electrical department.
- 3) Concealed wiring plan for telephone, internet and TV cable etc. should also be marked on Electric wiring diagram drawn on Engineering drawing by S&T Department (Distinguished by suitable colour and line style).
- 4) All electrical/telecom drawings for civil structure in addition to being signed by Elect (G) and S&T officials must have signature of sectional DEN/SrDEN and Sr.DEN/Co.
- 5) Civil work such as roof casting & plastering should not be started unless drawing at (4) above is finalised.
- 6) No electrical/telecom work should be allowed without an approved drawing having signature of officials mentioned above.

- 7) Electrical work in the new construction/renovation shall be permitted only after the go ahead of Sr.DEN & Sr.DEE(G).
- 8) In every building estimate, for cost of provision of TV cable conduits, Telephone/ Telecom-facilities etc. and electrical installations shall be as actual as per their sub- estimates.

To achieve better coordination for building works Composite Tender (Civil + Elect (G) works & Telecom works) should be called by Engineering Department. For this following procedure should be adopted.

- The tender schedule for Elect(G)/Telecom works should be prepared by Elect(G)/Telecom department duly approved by DEE(G)/SrDEE(G) & DSTE/SrDSTE along with all special conditions and incorporated as a separate schedule in composite tender.
- Separate rates should be called for Elect(G) and Telecom schedules.
- Invariably third member of TC for such work should be from Elect(G) department. If not then rate analysis and justification should be called from branch officer of Elect(G) and same should be referred in TC/ Similarly for Telecom works also rate analysis and justification should be called form branch officer of S&T department.
- Work order, Execution, Supervision, Measurements, Test Checks etc for Elect(G)/Telecom works shall be done by Elect(G) /Telecom department as it is done for their own contract. Billing shall be done by Engineering Department.
- A special condition may be introduced that "tenderer should have experience of execution of Electrical works also and have valid Electrical license or should submit an affidavit/agreement signed on stamp paper (as per Annexure) for assurance of engaging a person /agency having experience of electrical work who possesses valid electrical license" for execution of electrical works and to meet the any other condition specified/introduced time to time.

  
(Sunil Goyal)  
CEE/NR

  
(Akhil Agrawal)  
CSTE/NR

  
(R.K. Agrawal)  
PCE/NR

No. 74-W/O/Pt.XXVIII/WA

Dated: 09.04.2015  
10

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- All HODs & Dy.HODs of concerned Deptt. — HOD — CE/HQ
- All Sr.DEN/Cs/NR, All Sr.DSTEs/NR & All Sr.DEE/G/NR
- Dy.CVO/E/NR

Principal, CETA/Kanpur.

OS/Policy/Engg. Deptt. to keep one copy in CE's Circular file.

XEMHO  
16/4/15