(18)

OFFICE OF THE ENGINEER-IN-CHIEF
P.W.D. NIRMAN BHAVAN, NORTH BLOCK,
SECTOR-19 NAYA RAIPUR (CHHATISGARH)

AMMENDMENT NO. 04

No.65011/263 /SOR/ Naya Raipur, Dated 04 /05/2018

The following ammendments are hereby issued in the items mentioned below in S.O.R. for Building Works (in effect from 01-01-2015)

1. Chapter-7- BRICK WORK

1) Item No. 7.26 is added as given below.
2) Item No. 7.27 is added as given below.

Item No.	Description	Unit	Rate Rs
7.26	Providing and laying precast lime fly ash concrete blocks 1:2:3:6 (1 lime: 2 fly ash : 3 coarse sand : 6 graded stone aggregate 20 mm nominal size), including finishing with 10mm thick cement mortar 1:3 (1 cement : 3 coarse sand) as required in1:4 Cement mortar.	Cum	4376.00
7.27	Providing and laying LIGHT WEIGHT CELLULAR CONCRETE block in block masonry of width 100/ 200mm height 200/250/300mm, length 400/500/600 mm (approved sizes) with cement mortar 1 :6 (1 Cement :6 coarse sand) in superstructure. blocks should have specific gravity 0.8 to 0.65 and crushing strength should not be less than 3 N/ sqmm (testing as per IS: 6441 - 1972).	Cum	4229.00

2. Chapter-10- ROOFING AND CEILING

1) Item No. 10.52A is added as given below.
2) Item No. 10.66 is added as given below.
3) Item No. 10.67 is added as given below.
4) Item No. 10.68 is added as given below.
5) Item No. 10.69 is added as given below.
6) Item No. 10.70 is added as given below.
7) Item No. 10.71 is added as given below.
8) Item No. 10.72 is added as given below.

Item No.	Description	Unit	Rate Rs
10.52A	Providing and Fixing grid system of 600x600mm module for false ceiling tile 595x595 mm in true horizontal level, suspended on inter locking metal grid of hot dipped galvanised steel sections (galvanising @ 120 grams per sqm including both side) consisting of main 'T' runner suitably spaced at joints to get required length and of size 24x38 mm made from 0.33 mm thick (minimum) sheet , spaced 1200 mm centre to centre, and cross "T" of size 24x28 mm made out of 0.33 mm (Minimum) sheet, 1200 mm long spaced between main'T' at 600 mm centre to centre form a grid of 1200x600 mm and secondary cross 'T' of length 600 mm and size 24 x28 mm made of 0.33 mm thick (Minimum) sheet to be inter locked at middle of the 1200x 600 mm panel to from grid of size 600x600 mm, resting on periphery walls /partitions on a Perimeter wall angle pre-coated steel of size 24x24x3000 mm made of 0.40 mm thick (minimum) sheet with the help of rawl plugs at 450 mm centre to centre with 25mm long dry wall screws @ 230 mm interval Main 'T' runners to be suspended from ceiling using G.I. slotted cleats of size 25x35x1.6 mm fixed to ceiling with 12.5 mm dia and 50 mm long dash fasteners, 4 mm G.I. adjustable rods with galvanised steel level clips of size 85 x 30 x 0.8 mm, spaced at 1200 mm centre to centre along main 'T' , bottom exposed with 24 mm of all T-sections shall be pre-painted with polyster baked paint.	sqm.	365.00
10.66	Proving and fixing Acoustical Suspended Ceiling System made of GRG Glass fibre reinforced gypsum tiles with Micro look edge and size 595x595x12mm as approved by Engineer-In-charge, in true Horizontal Level Suspended on inter locking metal grid of hot dipped galvanised steel sections (galvanised @120 gsm/sqm, both side inclusive) consisting of main "T" Runner with suitably spaced joints to get required length and of size 15x32mm made from 0.30 thick (minimum) sheet, spaced at 1200mm center to center and cross "T" of size 15x32mm made of 0.30 thick (minimum) sheet, 1200 mm long spaced between main "T" at 600mm center to center to form grid of 1200x600 mm and secondary cross "T" of length 600 mm and size 15x32mm made of 0.30 mm thick (minimum) sheet to be interlocked at middle of the 1200x600 mm panel to form grids of 600x600 mm and wall angle of size 14x20mm and laying false ceiling tiles of approved texture in the grid, cutting/ making opening for services like diffusers, grills, light fitting, fixtures, smoke detectors etc wherever required. Main "T" runner to be suspended from ceiling using GI slotted cleats of size 27x37x25x1.6mm fixed to ceiling with 12.5mm dia and 50 mm long dash fasteners, 4mm dia GI adjustable rods with galvanised butterfly level clips of size 85x30x0.8 mm spaced at 1200mm center to center along main "T". Bottom exposed width of 15mm of all "T" sections shall be pre-painted with polyester paint, all complete for all heights as per specification drawings or as directed by Engineer-In-Charge. The tiles should have Humidity resistance (RH) of 99%, Light Reflectance >83%, Thermal Conductivity K=0.052-0.57w/mk, colour white, fire performance UK class 0/ Class 1(BS 476 pt-6 and 7) in module size of 600x600x16		

	mm with Bio Block coating on the face of the tile, suitable for green building application, with recycled content of 38-41%. Ceiling height up 3.5 mt from adjacent floor level.Extra height to be paid separately.		
10.66.1	With semi perforated 12 mm thick micro tegular edged GRG false ceiling tiles.	sqm.	1180.00
10.66.2	With fully perforated 12 mm thick micro tegular edged or 10 mm thick square edged GRG false ceiling tiles.	sqm.	1290.00
10.67	Proving and fixing Acoustical Suspended Ceiling System made of tiles of size 595x595mm and specified thickness as approved by Engineer-In-charge, in true Horizontal Level Suspended on inter locking metal grid of hot dipped galvanised steel sections (galvanised @120 gsm both side inclusive) consisting of main "T" Runner with suitably spaced joints to get required length and of size 24x38 mm made from 0.30 thick (minimum) sheet, spaced at 1200mm center to center and cross "T" of size 24x38mm made of 0.30 thick (minimum) sheet, 1200 mm long spaced between main "T" at 600mm center to center to form grid of 1200x600 mm and secondary cross "T" of length 600 mm and size 24x38mm made of 0.30 mm thick (minimum) sheet to be interlocked at middle of the 1200x600 mm panel to form grids of 600x600 mm and wall angle of size 24x24mm and laying false ceiling tiles of approved texture in the grid, cutting/ making opening for services like diffusers, grills, light fitting, fixtures, smoke detectors etc wherever required. Main "T" runner to be suspended from ceiling using GI slotted cleats of size 27x37x25x1.6mm fixed to ceiling with 12.5mm dia and 50 mm long dash fasteners, 4mm dia GI adjustable rods with galvanised butterfly level clips of size 85x30x0.8 mm spaced at 1200mm center to center along main "T". Bottom exposed width of 24mm of all "T" sections shall be pre-painted with polyester paint, all complete for all heights as per specification drawings or as directed by Engineer-In-Charge. The tiles should have Humidity resistance (RH) of 99%, Light Reflectance >83%, Thermal Conductivity K=0.052-0.57w/mk, colour white, fire performance UKclass0/Class1(BS476pt-6and7) in module size of 600x600x16 mm with Bio Block coating on the face of the tile, suitable for green building application, with recycled content of 38-41%. Ceiling height up 3.5 mt from adjacent floor level.Extra height to be paid separately.		
10.67.1	With 16 mm thick bevelled/ tegular edged mineral fibre false ceiling tile (NRC 0.55 to 0.6)	sqm.	1146.00
10.67.2	With 20 mm thick bevelled/ tegular edged mineral fibre false ceiling tile (NRC 0.7)	sqm.	1648.00
10.68	Proving and fixing Suspended Ceiling System made of following tiles specified thickness as approved by Engineer-In-charge, in true Horizontal Level Suspended on inter locking metal grid of hot dipped galvanised steel sections (galvanised @120 gsm both side inclusive) consisting of main "T" Runner with suitably spaced joints to get required length and of size 24x38 mm made from 0.30 thick (minimum) sheet, spaced at 1200mm center to center and cross "T" of size 24x38mm made of 0.30 thick (minimum) sheet, 1200 mm long spaced between main "T" at 600mm center to center to form grid of 1200x600 mm and secondary cross "T" of length 600 mm and size 24x38mm made of 0.30 mm thick (minimum) sheet to be interlocked		

	at middle of the 1200x600 mm panel to form grids of 600x600 mm and wall angle of size 24x24mm and laying false ceiling tiles of approved texture in the grid, cutting/ making opening for services like diffusers, grills, light fitting, fixtures, smoke detectors etc wherever required. Main "T" runner to be suspended from ceiling using GI slotted cleats of size 27x37x25x1.6mm fixed to ceiling with 12.5mm dia and 50 mm long dash fasteners, 4mm dia GI adjustable rods with galvanised butterfly level clips of size 85x30x0.8 mm spaced at 1200mm center to center along main "T". Bottom exposed width of 24mm of all "T" sections shall be pre-painted with polyester paint, all complete for all heights as per specification drawings or as directed by Engineer-In-Charge. The tiles should have Humidity resistance (RH) of 99%, Light Reflectance >83%, Thermal Conductivity K=0.052-0.57w/mk, colour white, fire performance UK class 0/Class 1(BS 476 pt-6 and 7) in module size of 600x600x16 mm with Bio Block coating on the face of the tile, suitable for green building application, with recycled content of 38-41%. Ceiling height up 3.5 mt from adjacent floor level .Extra height to be paid separately.		
10.68.1	With Perforated Vinyl laminated gypsum panels of size 595x595x9mm thick, having 3x3mm square perforations @ 8.33mm pitch - 10.2 % open area tapered edge having density 800 Kgs/cum, weight 7.2 Kg/sqm, NRC upto 0.75	sqm.	1053.00
10.68.2	With Designer fibre cement tiles (high pressure steam cured and pre-painted) of size 595x595x3.2mm thick NRC upto 0.5	sqm.	799.00
10.69	Providing and fixing false ceiling at all heights with 15 mm thick integral densified tegular edged light weight calcium silicate false ceiling tile reinforced with fibre and natural filler false ceiling tiles of Size 595x595 MM of approved texture, design and patterns (such as cosmos, spinton,quatra,golb) having NRC (Noise Reduction coefficient) of 0.50 (minimum) as per IS 8225:1987, Light reflectance of 85% (minimum). Non combustible as per BS:476 (part-4), fire performance as per BS:476 (part 6 &7), humidity resistance of 100%, thermal conductivity 0.048 to 0.050 W/m0KC as per ASTM 518:1991,Weight 1.900 Kg to 2.100 Kg per tile,15 MM Edge Density Having 450 Kg/cum & 10 MM Central portion of tile having 350 Kg/cum. in true horizontal level suspended on interlocking metal T-Grid of hot dipped galvanised iron section of 0.33mm thick (galvanized@120 grams per sqm including both sides) comprising of mainT runners of size 24x38 mm of length 3000 mm, cross - T of size 24x32 mm of length 1200 mm and secondary intermediate cross-T of size 24x32 mm of length 600mm to form grid module of size 600 x 600 mm, suspended from ceiling using galvanised mild steel items (galvanizing @ 80 grams per sqm) i.e. 40 mm long, 8 mm outer diameter M-6 dash fasteners, 6 mm dia fully threaded hanger rod upto 1000 mm length & L-shape level adjuster of size85x25x25x2mm. Galvanised iron perimeter wall angle of size24x24x0.40mm of length 3000 mm to be fixed on periphery wall / partition with the help of plastic rawl plugs at 450 mm center to center and 40 mm long dry wall S.Sscrews.The work shall be carried out as per specifications, drawing and as per directions of the	sqm.	1458.00

	Engineer-in-Charge. Ceiling height up 3.5 mt. from adjacent floor level.Extra height to be paid separately.		
10.70	Providing and fixing false ceiling at all heights with 15 mm thick integral densified Microlook tegular edged light weight calcium silicate false ceiling tile reinforced with fibre and natural filler false ceiling tiles of Size 595x595 MM of approved texture, design and patterns (such as cosmos, spinton,quatra,golb) having NRC (Noise Reduction coefficient) of 0.50 (minimum) as per IS 8225:1987, Light reflectance of 85%(minimum).Non combustible as per BS:476 (part-4), fire performance as per BS:476 (part 6 &7), humidity resistance of 100%, thermal conductivity 0.048 to 0.050 W/m0 KC as per ASTM 518:1991,Weight 1.900 Kg to 2.100 Kg per tile,15 MM Edge Density having 450 Kg/cum & 10 MM Central portion of tile having 350 Kg/cum, in true horizontal level suspended on interlocking metal powder coated T-Grid of hot dipped galvanised iron section of 0.40 mm thick on Silhouette grid ,rotary stiched double webbed white with 6 mm reveal profile (white/black),comprising of main-T runners of size 15x42 mm of length 3000 mm, cross-T of size 15x42 mm of length 1200 mm and secondary intermediate cross-T of size 15x42 mm of length 600mm to form grid module of size 600x 600 mm, suspended from ceiling using galvanised mild steel items (galvanizing @ 80 grams per sqm) i.e. 40 mm long, 8 mm outer diameter M-6 dash fasteners, 6 mm dia fully threaded hanger rod upto 1000 mm length and L-shape level adjuster of size85x25x2mm. Galvanised iron perimeter wall angle of size 22x19x0.40 mm of length 3000 mm to be fixed on periphery wall / partition with the help of plastic rawl plugs at 450 mm center to center and 40mm long dry wall S.S screws. The work shall be carried out as per specifications, drawing and as per directions of the Engineer-inCharge. Ceiling height up 3.5 meter. from adjacent floor level.Extra height to be paid separately.	sqm.	1684.00
10.71	Providing and fixing in position wall panelling at all heights with integral densified calcium silicate panels/tiles of size 595 x 595mm, having NRC (Noise Reduction coefficient) of 0.50 (minimum) as per IS 8225:1987, Light reflectance of 85% (minimum). Non combustible as per BS:476 (part-4), fire performance as per BS:476 (part 6 &7), humidity resistance of 100%, thermal conductivity 0.048 to 0.050 W/m0 KC as per ASTM 518:1991,Weight 1.900 Kg to 2.100 Kg per tile,15 MM Edge Density Having 450 Kg/cum & 10 MM Central portion of tile having 350 Kg/cum, comprising of a frame made from especiallyfabricated galvanised mild steel sheet 0.50 mm thick pressed section (galvanizing @120 grams per sqm including both sides) i.e.vertical studs of size 48 x 34 x 36 mm are placed at 600mm center to center in a floor and ceiling channel section of size 50 x 32m fixed to the floor and soffit at 600 mm centers using 12mm dia,40mm long wedge type expanded zinc alloy dash fastner with 10mm bolt. This same channel is then to be fixed in horiziontal direction at 600mm center to center so as to form a grid of 600mm x 600mm. Glasswool of 50mm thickness is then to be inserted in the slots and finally calcium silicate non combustible panels/tiles are to be screw fixed with self tapping pan head nickel coated mild steel	sqm.	2030.00

	screws of size 13 x 3.2mm on to this grid leaving an even groove of 1 mm between the panels. The joints between the panels are to be duly jointed and finished using recommended jointing calcium silicate based compound and fiber joint tape roll 50mm wide (90 metre)roll and two coats of primer suitable for panelling as per manufacturer's specification as per direction of Engineer-in-Charge all complete.		
10.72	Extra for additional height every 1m or part thereof where height of false ceiling work exceeds 3.5 meters from the floor under consideration for necessary scaffolding with adequate bracing, propping etc at all level of floor for all type of ceiling .Extra height shall be considered from adjacent floor to finished bottom level of false ceiling. (only plan area is to be measured):	sqm.	52.00

3. Chapter-12- FLOORING

1) Items 12.10, 12.11, 12.12 and 12.13 stands deleted.
2) Item No. 12.74 is added as given below.
3) Item No. 12.75 is added as given below.
4) Item No. 12.76 is added as given below.
5) Item No. 12.77 is added as given below.
6) Item No. 12.78 is added as given below.
7) Item No. 12.79 is added as given below.
8) Item No. 12.80 is added as given below.
9) Item No. 12.81 is added as given below.

Item No.	Description	Unit	Rate Rs
12.74	Providing and fixing rectified glazed ceramic Floor tiles of 1st quality conforming to IS : 15622-2017 of approved make, in all colours, shades over 20 mm thick bed of cement Mortar 1:3 (1 cement : 3 coarse sand) and jointing with grey cement slurry @ 3.3kg per sqm including pointing in white cement mixed with matching pigment complete.		
12.74.1	Size 300×300mm thickness 7 to 8mm	sqm.	779.00
12.74.2	Size 400×400mm thickness 7 to 8mm	sqm.	826.00
12.74.3	Size 600×600mm thickness 8 to 9mm	sqm.	897.00
12.75	Providing and fixing rectified glazed ceramic wall/dado tiles of 1st quality conforming to IS : 15622-2017 of approved make, in all colours, shades on wall and dados over 12 mm thick bed of cement Mortar 1:3 (1 cement : 3 coarse sand) and jointing with grey cement slurry @ 3.3kg per sqm including pointing in white cement mixed with matching pigment complete.		
12.75.1	Size 300x450mm thickness 7 to 8mm	sqm.	710.00
12.75.2	Size 300x600mm thickness 7 to 8mm	sqm.	850.00
12.75.3	Size 400x800mm thickness 7 to 9mm	sqm.	897.00
12.75.4	Size 450x900mm thickness 7 to 9mm	sqm.	900.00

12.76	Providing and laying Glazed Vitrified floor tiles (GVT/ PGVT) with digital print of random design with water absorption less than 0.05% and conforming to IS: 15622-2017 of 1st quality of approved make in all colours, shades and size mentioned below (+/- 10mm), laid on 20mm thick cement mortar 1:4 (1 cement: 4 coarse sand) including grouting the joints with white cement and matching pigments etc. complete.		
12.76.1	Size 600x600mm thickness 9 to 10mm	sqm.	964.00
12.76.2	Size 800x800mm thickness 9 to 10mm	sqm.	1153.00
12.76.3	Size 1000x1000mm thickness 10 to 12mm	sqm.	1514.00*
12.76.4	Size 1200x1200mm thickness 10 to 12mm	sqm.	2023.00*
12.77	Providing and laying Glazed Vitrified wall/dado tiles (GVT/ PGVT) with digital print of random design with water absorption less than 0.08% and conforming to IS : 15622-2017 of 1st quality of approved make in all colours and shades and size mentioned below (+/- 10mm) for wall /dado laid on 12mm thick cement mortar 1:4 (1 cement : 4 coarse sand) including grouting the joints with white cement and matching pigments etc. complete.		
12.77.1	Size 600x600mm thickness 9 to 10mm	sqm.	969.00
12.77.2	Size 800x800mm thickness 9 to 10mm	sqm.	1158.00
12.78	Providing and laying Matt/ Glazed finish HOMOGENEOUS ACROSS FULL BODY VITRIFIED floor tiles (heavy duty) with water absorption less than 0.05% and conforming to IS: 15622-2017 of 1st quality of approved make in all colours and shades and size mentioned below (+/- 10mm), laid on 20mm thick cement mortar 1:4 (1 cement: 4 coarse sand) including grouting the joints with white cement and matching pigments etc. complete.		
12.78.1	Size 600x600mm thickness 9 to 10mm	sqm.	1331.00
12.78.2	Size 800x800mm thickness 9 to 10mm	sqm.	1520.00
12.78.3	Size 1000x1000mm thickness 10 to 12mm	sqm.	1988.00*
12.79	Providing and laying DOUBLE/ MULTI CHARGE (minimum 2.0mm thick layer) VITRIFIED floor tiles with water absorption less than 0.05% and conforming to IS : 15622-2017 of 1st quality of approved make in all colours and shades and size mentioned below (+/- 10mm), laid on 20mm thick cement mortar 1:4 (1 cement : 4 coarse sand) including grouting the joints with white cement and matching pigments etc. complete.		
12.79.1	Size 600x600mm thickness 9 to 10mm	sqm.	1082.00
12.79.2	Size 800x800mm thickness 9 to 10mm	sqm.	1343.00
12.79.3	Size 1000x1000mm thickness 10 to 12mm	sqm.	1786.00*
12.79.4	Size 1200x1200mm thickness 10 to 12mm	sqm.	2461.00*
12.80	Providing and laying tactile full body vitrified tile (for vision impaired persons as per standard laid down in CPWD guide lines) of size having 300x300 and total thickness 15mm, water absorption less than 0.05% and conforming to I.S. 15622-2017 of H&R Johnson or equivalent approved make in all standard colour laid on 20 mm thick cement mortar 1:4 (1 cement : 4 coarse sand) including grouting the joints with white cement and matching pigments etc. complete.		

12.80.1	Dot pattern hazard warning tactile 23 mm dia 36 dots (6 dot in both direction) and 5mm exposed from the surface	sqm.	2127.00
12.80.2	Strip pattern directional tactile 23 mm strip 4nos equally spaced and 5mm exposed to the surface	sqm.	2127.00
12.81	Providing and laying tactile tile rubber mounded precast concrete tile wet tranverse strength not less than $3N/mm^2$ (for vision impaired persons as per standard laid down in CPWD guide lines) of size having 300x300 and total thickness 30 mm in all colour according to I.S.13801-2013 laid on 20 mm thick cement mortar 1:4 (1 cement: 4 coarse sand) including grouting the joints with white cement and matching pigments etc.		
12.81.1	Dot pattern hazard warning tactile 23 mm dia 36 dots (6 dot in both direction) and 5mm exposed from the surface	sqm.	889.00
12.81.2	Strip pattern directional tactile 23 mm strip 4nos equally spaced and 5mm exposed to the surface	sqm.	991.00

Note - * These items are to be executed only with prior permission of Chief Engineer.

All above ammendments shall be applicable with immediate effect.

Engineer-in-chief
P.W.D. Naya Raipur (C.G.)

Endt. No.65011/ 263 /SOR/ Naya Raipur, Dated 04/05/2018

Copy to the

1. P.A. to Honorable Minister of P.W.D.C.G. Govt. Raipur.
2. Secretary, C.G. Govt. P.W.D. Naya Raipur.
3. Secretary, Finance Department C.G. Govt. Naya Raipur
4. All Chief Engineers. P.W.D. Chhattisgarh.
5. All Superintending Engineer, P.W.D. Chhattisgarh.
6. Chief Technical Examiner (V) C.G. Raipur
7. Accountant General, C.G. Raipur
8. All Collectors, Chhattisgarh.
9. All Executive Engineer, P.W.D. Chhattisgarh.
10. Website Public Works Department https://www.cg.nic.in/pwdraipur

Engineer-in-chief
P.W.D. Naya Raipur (C.G.)

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