

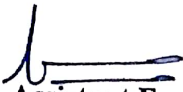
**MUNICIPAL CORPORATION OF BHILAI**  
**NIT**

वार्ड क्र. 50 स्थित ऑडिटोरियम भवन में साउण्ड सिस्टम लगाने एवं अन्य विकास कार्य।

(As Per PWD Electric SOR 01.06.2020 & NON SOR ITEM)

SN	PARTICULERS OF ITEMS	QTY.	UNIT
1	Supplying , installation , Testing and Commissioning of Advanced digital audio processor with open architecture software-configurable functionality Comprehensive library of DSP algorithms optimised for installation applications, 8 Channels of wide band Acoustic ----, USB audio connection for integration with computer based audio, ULTRANET digital audio transport output for connection to compatible devices Ethernet port for software configuration via CAT5/5e cable with all necessary terminals and Connectors.	1	Each
2	Supplying , installation , Testing and Commissioning Wall Hanging Arrangement for Speaker Metal Wall Bracket with necessary accessories to mount the speakers on wall with all necessary terminals and Connectors.	18	Each
3	Supplying and drawing following sizes of FRLS PVC insulated copper conductor, multi strand wire in the existing surface/ concealed, FRLS PVC conduit / PVC casing capping as per specification and IS: 694 (2010) 3 x 1.5 sq. mm	150.00	Mtr.
<b>NON SOR ITEM</b>			
3	<p>Providing and fixing acoustic insulation treatment to the ceiling (concrete soffit) in a premises using high performance acoustic insulation sheets of TIKIDAN make comprising of 28mm multi-layer composite acoustic panel DANOFON, 40mm Rockwool of density 70Kg./cu.m ROCDAN 231/40 and 4mm high density mass loaded sound barrier sheet M.A.D 4, along with other accessories and fixtures etc., all complete as per the procedure given below, the laying of the acoustic treatment shall be done by the authorized applicator of the manufacturer of acoustic sheets:</p> <p><b>SURFACE PREPARATION:</b> The surface of the ceiling (concrete soffit) should be sound and shall have smooth finish in true plumb &amp; in line and should be dry, free from algae growth, rising water, major cracks etc. The surface shall be thoroughly cleaned to remove dust and foreign particles.</p> <p><b>MULTI-LAYER ACOUSTIC PANEL:</b> Providing and fixing 28mm thick multi-layer composite acoustic panel DANOFON of TIKIDAN make, made of 4mm thick mass loaded high density sound deadening anti-resonant sheet of density &gt;1800 Kg./m3 thermally bonded on both faces with 12mm thick sound absorbing porous mass of density 50 Kg./m3 and providing airborne sound insulation (Rw) to extent of 63 dBA (as per EN 140-3 and EN 717-1), the acoustic panel shall comply with the requirement of Class A of decree No. 2011-321 of March 23, 2011 of French Ministry of Ecology, Sustainable Development, Transport and Housing, shall have acoustic certification from L.G.A.I, LABEIN, INSTITUTO TORROJA for Isolation Index in accordance with UNE-EN-ISO 140-3:1995, and be of 1m x 6m Size and shall have Longitudinal Tensile Strength (EN 12311-1) of &gt;480 N/5cm, Transversal Tensile Strength (EN 12311-1) of 275 N/5cm, Nail Shank Tear Resistance (EN 12310-1) of &gt;370 KN/m, V.O.C &lt;100 µg/m3 (ISO 16000-6:2006), and Total Thermal Resistance R-Value 0.77 m2K/w (EN 12667, EN 12939), the acoustic panel fixed to the wall surface covering entire area by means of insulation fixtures with rubber washers @ 600mm c/c.</p> <p><b>METAL-STRUT FRAMING and CAVITY FILLING:</b> Providing and fixing metal strut concealed framework G.I / Aluminium surrounding the ceiling area (suspended including all necessary metal suspension system fixed to concrete soffit to required level), the metal framing isolated from surrounding rigid surfaces using self-adhesive underlay tape of 46mm wide and 3.9mm thick multi-layer composite acoustic isolation tape FONODAN 50 of TIKIDAN make of size 0.046m x 10m, including filling strut cavity of metal framing with 40mm mineral wool panel ROCDAN 231/40 of TIKIDAN make of density 70 Kg./Cu.M and size 1.2m x 0.60m, placed with joints tightly butted.</p> <p><b>PLASTER BOARD with SOUND BARRIER:</b> Providing and fixing ceiling framing closure using 12.5mm tapered edge regular gypsum plaster board by placing the gypsum plaster board 2mm to 3mm away from the floor, ceiling, or adjoining walls to provide mechanical decoupling and fixed to metal framing using 25mm self-tapping screws-sheet metal / thread screws having Phillips head with under head cutter @ 300 c/c, the joints sealed with jointing compound and fibre tape, followed by fixing of 4mm thick mass loaded, high density, visco-elastic, flexible sound deadening, anti-resonant sound barrier sheet M.A.D 4 of TIKIDAN make of density &gt;1800 Kg./m3, nominal mass of &gt;7.2 Kg./m2 and of 1mx6m size in roll form, having acoustic certifications from AUDIOTEC, FONOTEL, L.G.A.I, LABEIN, and UPLA, INSUL for Isolation Index in accordance with UNE-EN-ISO 10140-2:2011 and ISO 717-1: 2013 and Singapore Green Building Product Certification (SGBC) with rating "Very Good", nail shank tear resistance (EN 12310-1) of &gt;130 KN/m, V.O.C of 50 µg/m3 (ISO 16000-6) and complying with the requirement of Class A + of decree No. 2011-321 of March 23, 2011 of French Ministry of Ecology, Sustainable Development, Transport and Housing, the sound barrier sheet fixed to gypsum plaster board by nailing / stapling / self-tapping screws-sheet metal, the installation finally concealed by covering using 12.5mm tapered edge regular gypsum plaster board, the gypsum board fixed using 25mm self-tapping screw-sheet metal / thread screws having Phillips head with under head cutter @ 300 c/c, the joints of gypsum plaster board sealed air tight with jointing compound and fibre tape including sealing of gaps between the metal frame installation and the surrounding structure with elastomeric sealant TIKISEAL PU25 of TIKIDAN make, etc., all complete. Measure the area actually executed (Does not include the final finish on plasterboard).</p>	576.00	Sqm

  
**Executive Engineer**  
Municipal Corporation  
Bhilai

  
**Assistant Engineer**  
Municipal Corporation  
Bhilai

  
**Sub Engineer**  
Municipal Corporation  
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