

N/W Interior designing and allied works at Level-6 of Faculty Building Annexe at IIT Kanpur. (SH: Interior Works)

SLNo	Description	Qty	Unit	Rate	Amount
1.00	Finishing Works				
1.01	Providing and fixing ISI marked flush door shutters conforming to IS : 2202 (Part I) non-decorative type, core of block board construction with frame of 1st class hard wood and well matched commercial 3 ply veneering with vertical grains or cross bands and face veneers on both faces of shutters:				
1.02	35 mm thick including ISI marked Stainless Steel butt hinges with necessary screws	15	sqm	2328.05	34,921.00
1.03	Extra for providing lipping with 2nd class teak wood battens 25 mm minimum depth on all edges of flush door shutters (over all area of door shutter to be measured).	15	sqm	449.87	6,748.00
1.04	Extra for cutting rebate in flush door shutters (Total area of the shutter to be measured).	15	sqm	103.82	1,557.00
1.05	Providing & Fixing decorative high pressure laminated sheet of plain / wood grain in gloss / matt/ suede finish with high density protective surface layer and reverse side of adhesive bonding quality conforming to IS : 2046 Type S, including cost of adhesive of approved quality.				
1.06	1.5 mm thick	29	sqm	1017.71	29,514.00
1.07	Steel work welded in built up sections/ framed work, including cutting, hoisting, hinges, ms handle as required, fixing in position and applying a priming coat of approved steel primer using structural steel etc. as required.				
1.08	In gratings, frames, guard bar, ladder, railings, brackets, gates, safety grilled door and similar works	100	kg	167.94	16,794.00
1.09	Providing and fixing carbon steel galvanised (minimum coating 5 micron) dash fastener of 10 mm dia double threaded 6.8 grade (yield strength 480 N/mm ²), counter sunk head, comprising of 10 mm dia polyamide PA 6 grade sleeve, including drilling of hole in frame , concrete/ masonry, etc. as per direction of Engineer-in-charge.				
1.10	10 x 80 mm	50	each	133.93	6,697.00
1.11	10 x 140 mm	75	each	177.28	13,296.00
1.12	Providing and fixing false ceiling at all heights including providing and fixing of frame work made of special sections, power pressed from M.S. sheets and galvanized with zinc coating of 120 gms/sqm (both side inclusive) as per IS : 277 and consisting of angle cleats of size 25 mm wide x 1.6 mm thick with flanges of 27 mm and 37mm, at 1200 mm centre to centre, one flange fixed to the ceiling with dash fastener 12.5 mm dia x 50 mm long with 6 mm dia bolts, other flange of cleat fixed to the angle hangers of 25x10x0.50 mm of required length with nuts & bolts of required size and other end of angle hanger fixed with intermediate G.I. channels 45x15x0.9 mm running at the spacing of 1200 mm centre to centre, to which the ceiling section 0.5 mm thick bottom wedge of 80 mm with tapered flanges of 26 mm each having lips of 10.5 mm, at 450 mm centre to centre, shall be fixed in a direction perpendicular to G.I. intermediate channel with connecting clips made out of 2.64 mm dia x 230 mm long G.I. wire at every junction, including fixing perimeter channels 0.5 mm thick 27 mm high having flanges of 20 mm and 30 mm long, the perimeter of ceiling fixed to wall/partition with the help of rawl plugs at 450 mm centre, with 25 mm long dry wall screws @ 230 mm interval, including fixing of gypsum board to ceiling section and perimeter channel with the help of dry wall screws of size 3.5 x 25 mm at 230 mm c/c, including jointing and finishing to a flush finish of tapered and square edges of the board with recommended jointing compound , jointing tapes , finishing with jointing compound in 3 layers covering upto 150 mm on both sides of joint and two coats of primer suitable for board, all as per manufacturer's specification and also including the cost of making openings for light fittings, grills, difusers, cutouts made with frame of perimeter channels suitably fixed, all complete as per drawings, specification and direction of the Engineer in Charge but excluding the cost of painting with :				
1.13	12.5 mm thick tapered edge Glass Reinforced Gypsum (GRG) board conforming to IS: 2095 (Part 3):1996 (Boards with BIS certification marks)	200	sqm	1479.06	295,812.00

1.14	Providing and Fixing 15 mm thick densified tegular edged eco friendly light weight calcium silicate false ceiling tiles of approved texture of size 595 x 595 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 to 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 25 mm long dry wall screws @ 230 mm interval and laying 15 mm thick densified edges calicum silicate ceiling tiles of approved texture in the grid, including, cutting/ making opening for services like diffusers, grills, light fittings, fixtures, smoke detectors etc., wherever required. Main 'T' runners to be suspended from ceiling using al. 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, for all heights, as per specifications, drawings and as directed by Engineer-in-Charge. Note :- Only calcium silicate false ceiling area will be measured from wall to wall. No deduction shall be made for exposed frames/opening (cut outs) having area less than 0.30 sqm.The calcium silicate ceiling tile shall have NRC value of 0.50 (Minimum), light reflection >85%, non- combustible as per B.S. 476 part IV, 100% humidity resistance and also having thermal conductivity <0.043 w/mK.	62	sqm	2099.88	130,193.00
1.15	Providing and applying white cement based putty of average thickness 1 mm, of approved brand and manufacturer, over the plastered wall surface to prepare the surface even and smooth complete.	360	sqm	151.84	54,662.00
1.16	Wall painting with premium acrylic emulsion paint of interior grade, having VOC (Volatile Organic Compound) content less than 50 grams/ litre of approved brand and manufacture, including applying additional coats wherever required to achieve even shade and colour.				
1.17	Two coats	360	sqm	138.94	50,018.00
1.18	Providing and fixing aluminium work for doors, windows, ventilators and partitions with extruded built up standard tubular sections/ appropriate Z sections and other sections of approved make conforming to IS: 733 and IS: 1285, fixing with dash fasteners of required dia and size, including necessary filling up the gaps at junctions, i.e. at top, bottom and sides with required EPDM rubber/ neoprene gasket etc. Aluminium sections shall be smooth, rust free, straight, mitred and jointed mechanically wherever required including cleat angle, Aluminium snap beading for glazing / panelling, C.P. brass / stainless steel screws, all complete as per architectural drawings and the directions of Engineer-in-charge. (Glazing, paneling and dash fasteners to be paid for separately) :				
1.19	For fixed portion				
1.20	Powder coated aluminium (minimum thickness of powder coating 50 micron)	150	kg	516.57	77,486.00
1.21	Providing and fixing 12 mm thick frameless toughened glass door shutter of approved brand and manufacture, including providing and fixing top & bottom pivot & double acting hydraulic floor spring type fixing arrangement and making necessary holes etc. for fixing required door fittings, all complete as per direction of Engineer-in-charge (Door handle, lock and stopper etc.to be paid separately).	20	sqm	5182.10	103,642.00
2.00	INTERIOR WORKS:				

2.01	Providing and fixing Overhead surface-mounted rack & pinion door closer DORSET DC80PDC, ISI marked & certified as per IS:3564:1995 Hydraulically Regulated Door Closer, Designation 3, Universal and Tubular Type suitable for wooden doors; scissor arm with adjustable closing and latching; hinge-side installation; suitable for door width up to 1100 mm, and door weight from 61kg to 80 kg; endurance tested to 500,000 cycles; finish: Silver of Dorset or similar approved make including the cost of screws and other incidental charge as per approved sample complete. including the cost of screws and other incidental charge as per approved sample complete.	6	each	4232.00	25,392.00
2.02	Providing and fixing SS-304 Door leg stopper with twin leg rubber buffer; prevents damage to door and wall; endurance tested 10000 cycles of Dorset (DS2HTSS304) or approved make including the cost of screws and other incidental charge as per approved sample complete.	6	each	819.00	4,914.00
2.03	Providing and fixing SS-304 Door buffer with rubber buffer; prevents damage to door and wall of Dorset (DS2HTSS304) or approved make including the cost of screws and other incidental charge as per approved sample complete.	6	each	566.00	3,396.00
2.04	Providing and fixing SS mortise lock body/ backset 50mm/ centre to centre: 85mm/ strike plate (Article No. ML110SS) of Dorset or approved make including the cost of screws and other incidental charge as per approved sample complete.	6	each	1907.00	11,442.00
2.05	Providing and fixing SS-304 cylinder lock one side key and one side knob 60 mm (Article No. CL101SS) of Dorset or approved make including the cost of screws and other incidental charge as per approved sample complete.	4	each	1341.00	5,364.00
2.06	Providing and fixing SS-304 cylinder lock both side key 60mm- for flush door 35-38mm thickness (Article No. CL100SS) of Dorset or approved make including the cost of screws and other incidental charge as per approved sample complete.	2	each	1224.00	2,448.00
2.07	Providing & fixing SS 'D' TYPE Lever Handle 22MM Dia SS- 304 Grade- FIRE RATED (Pair) (SDORSS22) of Dorset or approved make including the cost of screws and other incidental charge as per approved sample complete.	6	Pair	2588.00	15,528.00
2.08	Providing and fixing SS 304 handle ISI marked with necessary screws etc. 'D' type pull handle dia. 22mm of Dorset or approved make including the cost of screws and other incidental charge as per approved sample complete. 300mm	7	Pair	2773.00	19,411.00
2.09	Providing and fixing SS tower bolts Kich/Dorset make or equivalent ISI marked with necessary screws etc. complete:300mm	6	each	1135.00	6,810.00
2.10	Providing and fixing SS Corner Patch lock Kich/Dorset make or equivalent ISI marked with necessary screws etc.	7	each	1931.00	13,517.00
2.11	Providing and fixing smart lock for framed glass doors lock (Dorset DG102MGM or equivalent) ISI marked with necessary screws etc.	5	each	16318.00	81,590.00
2.12	Providing and fixing smart lock for frameless glass doors(Ozone make-OZ FGL-LIFE.G2G Black or equivalent) ISI marked with necessary screws etc.	5	each	22965.00	114,825.00
2.13	Providing and laying vitrified floor tiles in different sizes (thickness to be specified by the manufacturer) with water absorption less than 0.08% and conforming to IS: 15622, of approved make, in all colours and shades, laid on 20mm thick cement mortar 1:4 (1 cement : 4 coarse sand), jointing with grey cement slurry @ 3.3 kg/ sqm including grouting the joints with white cement and matching pigments etc., complete. Full Body tile (600x1200mm)	195	sqm	2176.00	424,320.00

2.14	<p>Supply & installation of merino HDF core board AC4 wooden flooring , made from tropical hardwood species such as Meranti,Jelutong, Acacia & etc, rated as one of the best in the global market in term of high dimensional stability and moisture resistance properties. HDF core board's swelling was tested in accordance with European Norm EN 13329 standard and is rated well < 18%. Being environmentally responsible, Merino HDF is made only from wood waste materials such as off-cuts, peeler core, and wood slabs where in the past, these waste materials had to be disposed of.Nature line 832 , Tropical Chengal Thickness: 8mm Texture: Silky Gloss AC rating: AC 4 Dimension: 196 x 1288 x 8mm Packaging: 8 pieces/pkg: 2.02 sqm/pkg Locking system: R -Lock Warranty: 20 yrs heavy domestic: 15 yrs moderate commercial. .Composition:-1. Overlay Superior moisture resistance and water resistance 2. Decor Paper-High-precision printing Realistic patterns and trendy design3. Tropical Hardwood HDF-Extremely low thickness swelling & high dimension stability 4. Vacuum Edge Protection System Perfect edge protection against moisture Minimum squeaking sound upon installation 5. Backer Superior moisture resistance & water resistance. as per approved drawing specification & direction of Engineer-in-Charge</p>	190	sqm	1634.00	310,460.00
2.15	<p>Baffle Ceiling System with (100mmx25mmx3600mm) Providing & fixing horizontal level suspended ceiling comprising of Knauf Vertical Linear Baffle Ceiling made out of Aluminum Extrusion in Aluminum alloy grade 6063 T5. The baffle blade shall be in size of 100x25x3600mm in powder coated to Woodgrain/Plain finish (Red Oak, Cherry, Black / White). The baffle shall be electrostatically polyester powder coated to a coating thickness of 60-80 micron. The powder coating shall pass Salt Spray Test for 750 Hours as per ASTM B117, QUV -A Test for 1000hours as per ASTM G-154 – (Cycle – 1) and Humidthickity test for 1000hours as per DIN 50017. The powder coating shall have an adhesion of GT0 as per EN ISO 2409. The shade variation within a manufacturing batch shall be delta E<1 using Excite/BYK Gardner instrument and gloss level 25±5% at 60° as per ASTM D523 (Not applicable of Wood Grain Shade). The baffle blade shall be suspended using Slotted U-profile of 20 x 30 x 3700mm (Thk-1.5mm) having slots in module of 25mm to keep baffles at an on-center spacing in multiples of 25mm. Longer lengths of Baffle to be connected by Baffle Joiner and the ends to be fixed with End caps. as per approved drawing specification & direction of Engineer-in-Charge</p>	75	sqm	10166.00	762,450.00
2.16	<p>Glass Wool Grid Ceiling (600x600)-Glass Wool Providing and fixing Acousitc tegular edge tile with 15 mm thickness ,easily demountable tile , manufactured from High density glass wool , visible surface is a batch painted glass tissue in white, back of the tile covered with glass tissue. Size 600x600x15mm Acoustics-Sound absorption(Alpha W) - 0.95 at 200 mm o.d.s as per EN ISO 354 Acoustics-Sound absorption Class - Class A at 200 mm o.d.s as per EN ISO 11654 Acoustics-Articulation class - 180 as per ASTM E1111, ASTM E1110 NRC - 0.9 NRC as per ASTM C 423 Humidity Resistance -Permanent ambient RH up to 95% at 30°C without sagging, warping and delaminating (13964:2014). Fire Safety - Tested and classified as non combustibile according to EN ISO 1182 with reaction to fire classification class A2 s1 d0 according to EN 13501-1 - European Standard. Light Reflectance - 83% light reflectance. Indoor Health & Well-being - Complying with the French regulation on VOC emissions, A+ level. Certified by the Finnish Building Information Group (RTS) with the M1 label. Free from substances of very high Concern (SVHC) above 100 ppm as defined by the European REACH regulation (No1907/2006).Product Certified under GRIHA council of India for Green Ratings. Environmental Product declaration (EPD) acc to international ISO 14025 & EN 15804 series of standards. Circularity - Re-cycled content of more than 70% Environmental Footprint - Environmental Product declaration (EPD) acc to international ISO 14025 & EN 15804 series of standards CE marking - CE-marked according to the harmonised standard EN 13964:2014</p>				

2.17	<p>Framing system:- Providing and fixing GI T Grid system in 600x600mm module which includes providing and fixing wall angle along the perimeter of the room with help of nylon sleeves and wooden screws at 300mm centers. Then suspending the main tee of size from the soffit with help of soffit cleat, rawl plugs and wire rod with Leveling spring clip at 1200mm c/c. 1200mm Cross Tee is then interlocked into the pre-cut slots in the main Tees at 600mm centres in direction perpendicular to the main Tee to make a grid of 600x1200mm. Finally 600mm Cross tees are then interlocked into the pre cut slots in the 1200mm tees at 1200mm centres and in direction parallel to the main tee. Cross Tees having length more than 600mm are to be supported independently.</p> <p>Dimensions:- Main Runner 'T' section of size 14x32mm hot dipped galvanized steel body and capped with precoated of dipped galvanized steel and 3.6mtr. Long. Cross Runner 'T' section of size 14x32mm hot dipped galvanized steel body and capped with precoated of dipped galvanized steel and 1.2/0.6mtr. Long. Perimeter wall angle of hot dipped galvanized steel angle body of size 19x19mm and 3.05mtr. long. as per approved drawing specification & direction of Engineer-in-Charge</p>	225	sqm	2243.00	504,675.00
2.18	<p>Wooden Slats</p> <p>Providing and Fixing Knauf Channelled Woodworks perforated panels of width 192mm, thickness of 15mm and length 2400 mm, made of a Moisture resistant fibre board substrate with a laminated facing as per the approved shade (Portland Maple, Sea Beech, Siam Wood & Mystique Walnut, Interior White, Alumina Pearl) and a melamine balancing layer on the reverse side. The boards shall have a special perforation pattern where the reverse surface has a "Helmholtz" fluted perforation with consecutive 3mm wide groove followed by 21mm of visible pane. The edges of the panel shall be "tongue-and-grooved" to fix special clips for installation and seamless visual. The back of the perforated panel shall have sound absorbing non-woven Soundtex acoustical fleece hot pressed to achieve NRC of 0.5. (Average value of Absorption Co-efficient readings taken at 250 Hz, 500 Hz, 1000 Hz and 2000 Hz) as per ASTM C423 and Humidity Resistance (RH) of 70% with camber limit less than 1mm/1000mm and bow less than 1mm/300mm. The panel shall be downwardly installed with tongue and groove mechanism using Inside clip on Knauf Prelude with 24 mm wide T - section flanges having rotary stitching on all T - sections i.e., the Main Runner, 1200 mm & 600 mm Cross Tees with a web height of 43mm, 35mm and 30mm respectively. as per approved drawing specification & direction of Engineer-in-Charge</p>	100	sqm	5980.00	598,000.00
2.19	<p>Wooden Grid Ceiling (600x600 Perforated)</p> <p>Providing & Fixing Knauf Wooden Finished Suspended Ceiling System with Woodworks Microlook edge tiles and Knauf 15mm Suprafine exposed grid. The 18mm thick Tile in RD6006 (RD6) perforation shall be made of Medium Density Fibre of density 700+ Kgs/m3 having perforation of hole diameter 6mm and open area 6% with linear & diagonal pitch of 32mm and 22.6mm respectively with a border of 33mm. The tile shall have melamine laminate finish of approved shade (Portland Maple, Sea Beech, Siam Wood & Mystique Walnut) on visible side and backing laminate (same shade) on the reverse with 0.8mm matching PVC edge banding in module size of 600mm x 600mm. The edges of the tile shall be Square Tegular/Microlook 90° having 8mm drop using 3mm thick compact board spline. Back side of the tile shall have Soundtex fleece hot pressed to achieve NRC of 0.4 (Average value of Absorption Co-efficient readings taken at 250 Hz, 500 Hz, 1000 Hz and 2000 Hz) as per ASTM C423 and Humidity Resistance (RH) of 70%, with sag limited to 1/300mm. The tile shall have a Fire Performance of class 1 according to BS 476 part 7.. as per approved drawing specification & direction of Engineer-in-Charge</p>	85	sqm	6429.00	546,465.00

2.20	<p>Techzone Ceiling (1200x600)</p> <p>Providing & fixing of Techzone (Module TZ4) ceiling system has a ceiling module of 1200x1350 and the on centre spacing between two adjacent technical zones is 1350 mm. The Techzone orientation is such that the main runners run parallel to the technical zone and hence making this layout compatible with continuous lighting fixtures or Air diffusers. Optra field panel is of size 1200x1200x20mm mm. The 150mm wide technical zone formed is where the technical elements like lighting fixtures & air diffusers would be installed. Where there are no technical elements the technical zone would be covered by using Optra or Metal Technical Panels of size 1200mm x150mm in conjunction with a special 150mm long cross tee. The Dune panels should have Humidity Resistance (RH) of 95, NRC 0.9, Light Reflectance ≥85%, Thermal Conductivity k = 0.052 - 0.057 w/m K, Colour White, Fire Performance UK Class 0 / Class 1 (BS 476 pt - 6 & 7), suitable for Green Building application, with Recycled content of 66%. The panels shall be laid on Armstrong Suprafine 38 with 15 mm wide T - section flanges colour white having rotary stitching on all T sections i.e. the Main Runner & 1200 mm Cross Tees with a web height of 38mm. The T Sections have a Galvanizing of 90 grams per M2 need to be installed with suspension system of Armstrong make. INSTALLATION: Technical zones to be formed by using 2 main runners which run parallel to each other at a distance of 150mm and thus forming a Technical zone of 150mm. The on centre spacing between two adjacent technical zones to be 1350mm. Thus we get a module of 1200x1350mm where 1350 is the on centre spacing between the adjacent technical zones. To lay the field panel of size 1200x1200mm, flush fitting 1200mm long cross tees to be interlocked between main runners at 1200mm centre. The technical zone where there are no technical elements can be covered using the technical panels of size 1200mm x 150mm. These technical panels to be laid in the technical zone using a special 150mm long cross tee interlocked at every 1200mm in the technical zone. Perimeter trim to be Armstrong wall angles of size 3000x19x19mm, secured to walls at 450 mm maximum centres.. as per approved drawing specification & direction of Engineer-in-Charge</p>	166	sqm	3289.00	545,974.00
2.21	<p>Stretched Ceiling</p> <p>Supply and installation of Anutone Stretch Hush system consisting of Hush fabric with polyester core, acoustically-transparent face covering of choice colour, size 1.4m, stretched by using combination of Anutone Strand2 primer, Anutone Strut FS15 Tracks, Anutone SynthPF 10x25 infill with Anutone strut framework.</p> <p>Anutone Strut framework system shall include Anutone Strut CC10, fully knurled, sectional thickness 0.55mm, length 3600mm, knurled web 540mm, depth 10mm and equal flanges 15mm is fastened to primary paneling Tufbloc HDFR horizontally at 600mm centers. Anutone Strand2 primer panels of size 600x1200x15mm, density 400kg/m3, weight 6kg/m2 are then fastened perpendicular to strut CC10 behind using suitable fasteners. Wooden/ply base 12mm are then installed on Strand2 primer on marked lines with metal fasteners at 300mm centers embedded in plastic sleeves.</p> <p>Fix Anutone Strut FS15 half wrap , Midseam and Outer corner, rigid FR-PVC high strength tracks square / bevel edge on the wooden surface by using heavy-duty fasteners at 150mm centers on one/both sides of Anutone Strut Tracks.</p> <p>Anutone SynthPF 10x25mm is then adhered on Strand2 primer, inbetween tracks, using Stick 7 adhesive.</p> <p>This completes the substrate to receive the Stretch Hush acoustical membrane.</p>				
2.22	<p>Anutone Stretch Hush acoustical fabric of width 1.4m is stretched and tucked into the Anutone Strut Tracks and secured to the locking jaws with purpose-specific tucking tools to obtain smooth, taut, wrinkle-free finish.</p> <p>Ensure the weft and weave of the fabric along with the surface all oriented in one direction to achieve uniform shade. Note: Minimum 100mm additional fabric is required for tucking hence maximum module wall fabric width would be 1300mm.</p> <p>Technical Parameters of finish product</p> <ul style="list-style-type: none"> • Fire (Class) – 1& P • Acoustics – NRC upto 0.65 (for system) • Climate (°C, RH) – 50, 90 • Light (%) – Shade dependent • Green (VoC, RC %) – Low, 25 <p>as per approved drawing specification & direction of Engineer-in-Charge</p>	36	sqm	8970.00	322,920.00

2.23	<p>Perforated Gypsum panels- 12.5 x 600mm x 600mm</p> <p>Providing & fixing high grade, glass-fibre reinforced, acoustic, gypsum panel with acoustic perforation as Unity 3 - square 3.5x3.5mm c/c 8.33 type U3.The DANOLOft® tiles shall be screw fixed on min. 60mm wood or steel furring. The DANOLOft® tiles are with edge B+ and are pre-painted ready for installation on site. DANOLOft® screws, type Torx 15, with white-painted head are used for screw-fixing. The acoustic DANOLOft® tiles are furnished with a grey (white) absorbent felt backing with an airflow resistance of 330-460 Ns/m³ (DIN 53887).</p> <p>Colour - White, NCS 0701 Y24R, gloss 5 (standard) or re-paintable at site with waterbased acrylic paint– Closest match for repainting: NCS 0700/RAL 9003.</p> <p>Paint Type - Waterbased acrylic emulsion paint including titanium for hygienic indoor climate.</p> <p>Light Reflection: 69.2% according to DIN Norm 5036.</p> <p>Acoustic Property - α_w: 0.95; NRC: 0.90</p> <p>Fire Class - A2-s1,d0</p> <p>Suspension - The DANOLOft® must be screw fixed to furring of 22 mm wood or 60mm steel battens at 300 mm c/c.</p> <p>Characteristics -</p> <p>The panels shall be:</p> <ul style="list-style-type: none"> • Manufactured from high grade non-combustible glass fibre reinforced gypsum board produced according to EN 520. • Tested to meet the safety requirements of EN 14190. • Tested in accordance with EN 13501-1 to achieve minimum fire classification A2-s1,d0. • Resistant to 90% RH and short term exposure for higher humidity. • Non hazardous and fully recyclable. <p>as per approved drawing specification & direction of Engineer-in-Charge</p>	115	sqm	3364.00	386,860.00
2.24	<p>Heradesign- Magnesite bonded wood wool acoustic panel</p> <p>Providing and fixing Knauf Heradesign Superfine, 1 layer magnesite bonded wood wool acoustic panel, 1mm thick fibre, exquisite surface structure, building biology recommended, size 600 x 600 x 25mm, having edge detail AK-01 (5mm bevel on all 4 sides), weight 11.30 Kg/Sqm, fire protection class B-s1,d0 as per EN 13501-1 & Humidity Resistance of 95%. Thickness Tolerance T2 (\pm 1 mm) according to EN 13168. Wood wool panels to be PEFC certified & should bear the Forest Stewardship Council Seal confirming that the wood used originates from responsibly managed forests.</p> <p>KCS UD profile 28mm/27mm/0.60mm is fixed to the wall, such that the base of the UD profile is 25mm above the planned finished ceiling level / 25mm less that the finished wall level. The ends of the Knauf CD profile is to be inserted into the Knauf UD profile and placed at a distance of 600mm centre to centre and is to be secured to the soffit/wall using the Knauf Heradesign Universal Bracket. The Universal brackets are to be fixed to the soffit/wall at a distance of 900mm using 6mm dia anchor fasteners (for ceilings). Heradesign wood wool boards to be screw fixed to the KCS CD profile using 6 screws (per board) 50/4.50mm dia Heradesign screws. The wood wool board should be backed by 40mm thick glass wool slabs packed in 600 x 600mm polythene bags having a gross density of 50kg/m³. The finished face of wood wool panels have to be installed at a distance of 300mm from the soffit to achieve a NRC of 0.90 as per ASTM C423. Panels can be spray painted on site (before installation) under supervision of manufacturer. as per approved drawing specification & direction of Engineer-in-Charge</p>	150	sqm	10769.00	1,615,350.00

2.25	<p>Open Cell Ceiling</p> <p>Providing and fixing horizontal level Knauf Cello Open cell Aluminum lay-in ceiling tiles with border panels forming board edge of size 600x600x38mm (Nominal) having cell size of 100x100mm made of AA-3003-H14 (Tempered) grade Aluminum suitable for architectural finishes in 0.35mm thickness as per in IS:2676 (1981) in Global white color. The tile shall be electrostatically polyester powder coated using RoHS compliant powder having coating thickness ranging from 60-80 microns. The powder coating shall pass Salt Spray Test for 750 hours as per ASTM B117, QUV –A Test for 1000 hours as per ASTM G-154 – (Cycle – 1) and Humidity test for 1000 hours as per DIN 50017. The powder coating shall have an adhesion of GT0 as per EN ISO 2409. The shade variation across batches shall be delta E<1 using Excite/BYK Gardner instrument and gloss level of 25±5% at 60° as per ASTM D523. Tile shall have a Fire Performance class A as per GB 8624-2012.</p> <p>To ensure specification of tiles, Manufacturers Test Certificate is required having complete site address & duly signed by Manufacturer.</p>				
2.26	<p>SUSPENSION: The tile shall be laid on Knauf Suprafine 38 with 15 mm wide T - section flanges color global white (matching to tile color) having double stroke rotary stitching on all T sections i.e. the Main Runner, 1200 mm & 600 mm Cross Tees with a web height of 38mm (all sections). The end details of the cross tee shall be made of pre hardened steel clip fixed to the ends of the cross tee to provide double locking between “crosstee tocross tee” and “cross tee to main beam”. All main beam to main beam and cross tee to cross tee connection shall have a pull-out strength of more than 100kg. The T Sections shall be made of hot dipped galvanized steel 90 gsm and pre-painted steel with baked polyester paint of OT bending capability.</p> <p>Perimeter trim to be Knauf wall angles of size 3000x19x19mm, secured to walls using screws at 450mm centre to centre maximum. Installation shall be carried out with appropriate suspension system as per Knauf recommended procedure & designs as per approved drawing specification & direction of Engineer-in-Charge</p>	55	sqm	5233.00	287,815.00
2.27	<p>Providing and applying on interior walls with approved premium-quality smooth finish and low voc, Z.E.D certified vapour permeable 100% natural lime based ultra smooth and matte texture finish of multi-layer composite system (Base Primer + texture base coat + natural lime based smooth texture + super durable acrylic silicon resin based top coat) having minimum thickness of 1.5-2 mm with coverage of 0.65 m²/kg, No cracking/peeling for 7+ years warranty, Special graded lime aggregates (max particle size 2 mm), Shrinkage compensating agents, Flow enhancers, Corrosion inhibitors, breatheable and water absorption: <1.6%, using proprietary quartz-reinforced acrylic silicon matrix system, in design approved pattern code for the texture over plastered wall surfaces or MDF panel, including complete surface preparation as follows- applying the appropriate rough SP primer coat of min. 80-100 microns followed by the application of approved base coat for the natural lime based texture then applying texture pattern with trowel or sponge with thickness of 1.5 mm to 2 mm, and finishing up by applying super durable acrylic silicon resin based top coat as per manufacturer's specification and instructions of Engineer-in-Charge. All components (texture, primer and topcoat) shall be from the same manufacturer and should be applied from the trained team of the manufacturer itself. The packing should be of 26 kg. The finish should be non-pigmented and 100% natural and UV resistant. Substitution not permitted. An authorization letter from the OEM must be submitted before execution, as per the direction of the Engineer-in-Charge.</p>	480	sqm	2168.00	1,040,640.00

2.28	<p>Acoustic Panel: Wooden Slats</p> <p>Providing and Fixing Knauf Channeled Woodworks perforated panels of width 192mm, thickness of 15mm and length 2400 mm, made of a Moisture resistant fibre board substrate with a laminated facing as per the approved shade (Portland Maple, Sea Beech, Siam Wood & Mystique Walnut, Interior White) and a melamine balancing layer on the reverse side. The boards shall have a special perforation pattern where the reverse surface has a "Helmholtz" fluted perforation with consecutive 3mm wide groove followed by 13/21mm of visible pane. The edges of the panel shall be "tongue-and-grooved" to fix special clips for installation and seamless visual. The back of the perforated panel shall have sound absorbing non-woven acoustical fleece hot pressed to achieve NRC upto 0.6. (Average value of Absorption Co-efficient readings taken at 250 Hz, 500 Hz, 1000 Hz and 2000 Hz) as per ASTM C423 and Humidity Resistance (RH) of 70% with camber limit less than 1mm/1000mm and bow less than 1mm/300mm. The panels shall be mounted on special aluminium splines (keel) using inside clips provided by Knauf and approved by the Architect/ Engineer-in-Charge. The panel shall be mounted by tongue and groove mechanism using inside clip on Knauf aluminium extruded keel made of Grade 6063-T5 having dimensions 3000(L) x 24(H) x 15.5(W). The keel shall also be used for transition of the butt end of adjacent panel at every 7.2m. To ensure specification of tiles, Manufacturers Test Certificate is required having complete site address & duly signed by Manufacturer. INSTALLATION: An appropriate vapour barrier (by others) shall be applied/installed on the vertical surface before the installation to properly seal against entry of any moisture. Vapour barrier (by others) shall be installed as per Manufacturer's recommendation. Install wooden batten grid (provided by others) of section 50x50mm or as approved by the Architect on the solid wall/partition to provide level and plumb surface for fixing Knauf Keel. Install Keel vertically using screws and plugs at spacing of not more than 600mm centre-to-centre. The first and last keel should not be more than 150mm from the ends. Trim the tongue of the first bottom panel and install using headless nail with groove side upward. Subsequent panels are installed with tongue side downward by engaging with each other using tongue and groove mechanism and secured by inside clip. Continue this process until required height is achieved. Shorter butt edges need to be joined using industrial/wood glue. The keel shall also be used for transition of the butt end of adjacent panel at every 7.2m. Install the Skirting (provided by others) of width 50mm or more as required by the Architect/ Engineer-in-Charge. Finish off the edges using wooden moulding of matching colour (by others). Installation should be carried out as per Knauf recommended procedure and designs approved by the Architect/ Engineer-in-Charge. APPROVED MAKE - Knauf Ceiling Solutions/ Nittobo/ Daikin. as per approved drawing specification & direction of Engineer-in-Charge</p>	75	sqm	12806.61	960,495.75
2.29	<p>Providing and Fixing Veneered wall panel</p> <p>Providing and fixing partition upto ceiling height consisting of G.I. frame and required board, including providing and fixing of frame work made of special section power pressed/ roll form G.I. sheet with zinc coating of 120 gms/sqm(both side inclusive), consisting of floor and ceiling channel 50 mm wide having equal flanges of 32 mm and 0.50 mm thick, fixed to the floor and ceiling at the spacing of 610 mm centre to centre with dash fastener of 12.5 mm dia meter 50 mm length or suitable anchor fastener or metal screws with nylon plugs and the studs 48 mm wide having one flange of 34 mm and other flange 36 mm and 0.50 mm thick fixed vertically within flanges of floor and ceiling channel and placed at a spacing of 610 mm centre to centre by 6 mm dia bolts and nuts, including fixing of studs along both ends of partition fixed flush to wall with suitable anchor fastener or metal screws with nylon plugs at spacing of 450 mm centre to centre, and fixing of boards to both side of frame work by 25 mm long dry wall screws on studs, floor and ceiling channels at the spacing of 300 mm centre to centre. The boards are to be fixed to the frame work with joints staggered to avoid through cracks, M.S. fixing channel of 99 mm width (0.9 mm thick having two flanges of 9.5 mm each) to be provided at the horizontal joints of two boards, fixed to the studs using metal to metal flat head screws, including jointing and finishing to a flush finish with recommended jointing compound, jointing tape, angle beads at corners (25 mm x 25 mm x 0.5 mm), joint finisher and two coats of primer suitable for board as per manufacture's specification and direction of engineer in charge all complete.</p>				

2.30	Panelling over G.I Framing composed of: 12 mm PLY + 6mm PLY + 4mm textured veneer on single side of paneling. The PLY should be Leed certified Green Products, FSC certified and CE certification. which insure the quality of the products to the international standards. The plywood 4 mm thick shall be one side decorative veneer conforming to IS: 1328 (type-1), for plain lining / cladding with necessary screws, including priming coat on unexposed surface with :Decorative veneer facings of approved manufacture.	49	sqm	9516.00	466,284.00
2.31	Acoustic Panel: Fabric wall Panel Providing and supplying Armstrong 'Optra Acoustical Wall Paneling' with square edges made of fibre glass substrate 25mm thick and wrapped on the front side with an acoustically transparent and classified for Fire reaction Class B-s1, d1 as per EN13501, fabric with an option of colors – Ivory, Autumn Orange, Pista Green, Straw Gold, Rustic Green, Burgundy, Rust, Peacock Blue, Ash Grey, Mocha as per the choice of the Architect of size 600X1200 mm providing a minimum sound absorption level of 0.90 NRC to be affixed to wall using Wall panel impalers supplied by M/s Armstrong Industries India Pvt. Ltd and construction adhesives as per the instructions laid down by the manufacturer. for multi-purpose hall & council room walls over panneling framing.With groove, joints and design pattern as per drawing. The PLY should be Leed certified Green Products, FSC certified and CE certification. The cost is included necessary nail, screw and adhesive etc. all complete. as per approved drawing specification & direction of Engineer-in-Charge	72	sqm	12951.00	932,472.00
2.32	Providing and laying Hand Knotted Oushak Rug, size 8'-0" x 10'-0"(2438 mm x 3048 mm ± 2% manufacturing tolerance), crafted using traditional Turkish Ghiordes (Symmetrical) knot technique on vertical loom. The Carper shall have Naturally Hypoallergenic, Inherent stain resistant, Inherently flame resistant(BS EN ISO 6941 / ASTM D6413), durable and resilient(Inherent fibre structure), thermal &acoustic insulation and anti-static properties. Knot Count: 10 x 10 knots per linear inch = 100 Knots Per Square Inch (KPSI) — Standard Oushak residential quality grade Pile Material: 100% Hand-Spun New Zealand Wool — Double-ply, naturally high-lanolin long-staple fleece sourced from certified New Zealand farms known for producing resilient wool fibres. Foundation (Warp & Weft):Warp: Undyed high-tensile hand-spun cotton Weft: Cotton — shot 2x between each knot row for structural stability Pile Height:Approx. 10–12 mm (0.4"–0.5") — Characteristic Oushak low-to-medium pile; hand sheared and hand-washed finish Backing: Open-weave cotton foundation — No secondary backing; natural flat reverse compatible with radiant floor heating Estimated Weight: Approx. 3.0–3.5 kg/m ² (Total approx. 22–27 kg per piece at 8' x 10') Dyeing Method: Vegetable-dyed / Low-chrome acid dye — Colourfast, UV-stable; min. ISO 105 B02 Grade 4 light-fastness Colour / Design / Pattern: As per Architect's / Interior Designer's approved drawing and colour board.. The Colour, design & Pattern shall be as per the approval of sample. as per approved drawing specification & direction of Engineer-in-Charge	3	each	164468.00	493,404.00
2.33	Providing and Installing Terracotta Jallis from Bangalore Tile Company / Nuvocotto of 200 x 200 x 60 MM of approved design / pattern. Installed using external tile adhesive, for tile to tile joints. MS Flats should be provided as stiffeners where ever required. MS Stiffeners or Frames must be joined with adhesives specifically for that (Eg: Drywall from Weber). The Colour, design & Pattern shall be as per the approval of sample. as per approved drawing specification & direction of Engineer-in-Charge	21	sqm	5316.00	111,636.00

2.34	<p>Providing and fixing Sheer Dimout Blinds as per the following details: Roller Tube: Made up of High Strength Anodized Aluminum Alloy Extruded grooved tube. Size: 39mm outside diameter; weight = 328gms/ mtr. Control Unit with Clutch Mechanism: The control unit is made of high strength reinforced plastic. The clutch is of warp spring design. High carbon steel springs are provided to transmit motion from the driven mechanism. Clutch is operated directionally by the use of beaded endless chain to raise and lower the blind smoothly to decide height. Idler: Idler is of high strength reinforced plastic, consisting of an outside sleeve and center shaft. Sleeve provide bearing surface for center shaft and rotate freely, providing smooth, quiet and long wearing operation.</p> <p>Round Type Bottom Rail: This is made up of high Strength Aluminum alloy Extruded tube, which is powder coated in white. Size: 14mm outside dia.; Weight =220 gms/running mtr. Triangle type Bottom Rail: This is made up of high Strength Aluminum alloy Extruded tube, which is powder coated in white. Size: Size: 15.6x28.8mm; Weight=260 gms/mtr. Head rail with Cover: This is Aluminum 6063T6Extruded Rail made up of High Strength Aluminum alloy, which is Powder Coated in White. Size 88.9x74.5 mm Width; weight= 800gms/mtr.</p>				
2.35	<p>Installation Bracket: It is made up of mild steel with white powder coating having thickness of 1.8 mm. it is used for mounting control unit & idler.</p> <p>Ceiling Bracket: It is made up of mild steel with white powder coating having thickness of 1.0 mm. it is used to fix the blind to the wall or ceiling.</p> <p>Operating chain: This is made of 4.5 mm plastic beads molded on 2.0 mm thick polyester cord. The pitch of the beads is 6mm. The chain drives the sprocket fixed in the end control unit to close and open the blind. The pitch of the chain corresponds to the sprocket in perfect match for trouble free operation.</p> <p>End Cap: End cap for triangular bottom rail, round bottom rail, Ceiling rail and valance are made up of high strength molded plastic in white colour.</p> <p>Fabric Construction: 100% Polyester, Fabric Thickness 0.30 Mm + 5%, Fabric Weight 112 GSM +5%, Fabric Max Width 280 Cm Fabric Repeat Size solid 7.5 cm + 5% Mesh 5 Cm + 5% Slight color aberration may exist and it is no reason for claims. Technical properties are based on average data and may exist deviation technical properties are used for reference and are not contractual. Origin Europe/ Asia..as per approved drawing specification & direction of Engineer-in-Charge</p>	86	Sqm.	5008.00	430,688.00
Total					11,866,885.75