

TECHNICAL SPECIFICATIONS

1.0 GENERAL

This specification is for work to be done, item to be supplied and materials to be used in the works as shown and defined in the drawings and described herein, all under the supervision and to the satisfaction of the Architects / Employer.

2.0 MATERIAL AND WORKMANSHIP

1. All Materials brought on site of works and meant to be used in the same shall be the best of their respective kinds and to the approval of the architects/Employer.

2. Samples of all materials shall be got approved by the Architects/Employer and shall be deposited with him before the order for the material is placed with the suppliers. The material brought on the works shall conform in every respect with approved samples.

3. The contractors shall check each fresh consignment of materials as it is brought on the site of the works, to see that they conform in all respects to the satisfactions and/or samples approved by the Architects.

4. The Architects/Employer will have the option to have any of the materials tested to find whether they are in accordance with the satisfaction and the contractor will bear all expenses in that connection. All bills, vouchers and test certificates which, in the opinion of the Architects/Employer or the representative, as necessary to convince him as to the quality of the materials of their suitability shall be produced for his inspection on requisition. Testing charges, if any, shall have to be borne by the contractor.

5. Any material that has not been found to conform to the specification will be rejected forthwith and shall be removed from the site by the contractors within 48 hours at their own cost.

6. The Architect/Employer shall have power to cause the contractors to purchase and use such materials, from any particular source, as may in his opinion be necessary for the proper execution of the work.

7. Workmanship: All works shall be to level, plumb and square corners, edges and rises in all cases shall be unbroken and finished neat.

8. Skilled mistries for the respective trades shall be employed by the contractors to check the work in progress and to instruct and extract the right kind of workmanship from the men employed on the works. Instructions given to such mistries by the architect or his representative shall be carried out with a view to get the work executed in a neat and workman-like manner according to these specifications.

9. The Architect/Employer may order the inspection of any finished work as he chooses and in a manner he decides, and the contractors shall bear all expenses in the connection. If the results of such inspection prove that the workmanship is not of the standard required, the work will be rejected and removed forthwith and replaced by works of the accepted standard of quality.

3.0 SPECIFICATION- MINERAL FIBRE TILE FALSE CEILING

False ceiling tiles will be of Fine Fissured type High NRC tiles of size 595 x 595mm and minimum 15mm thick manufactured from high density Glasswool with the visible surface be batch pre painted. The system should have sound Absorption NRC value of 0.7. Tiles should withstand a permanent ambient RH up to 95% without sagging, The light reflectance of the tiles should not be less than 83%. Providing and fixing Gypsteel pre coated (Exposed portion only) 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 dip 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 to 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. Tiles of size 595x595mm shall be placed into the grid size of 600x600mm.

4.0 SLIDING ALUMINUM WINDOW

Aluminum Sections will be Coloured Anodised in Factory with minimum 15 micron anodised and powder coating with 45 micron film thickness with matching horizontal glazing bars, fixing handles, angle cleat, rubber gasket, bolting device, locking arrangement, screws etc. as directed complete as specified and directed for all levels.

Aluminum sections will be of Min 1.5mm thickness and of Sliding Frame not less than 38 x 20mm. The frame of the window will be fixed to the wall with PVC Rawl plugs and screws. Glass will be cut as per size and fitted to Aluminum frame with a rubber Gasket 5mm size and Taper Clip will be provided for fixed portions. Sliding arrangement will be will Silicone/ PVC sliders.

5.0 ALUMINUM STRUCTURAL GLAZING

For fixing, MS Angle plates will be secured to building Steel Members by welding or bolts as directed. Aluminium Mother frame will be secured to the building by fixing it to the MS Angle plates at regular interval. Aluminium main frame will be of size 44.45 x 50 mm minimum and subframe of size 20 x 20 mm minimum. Joints between Aluminium Frames will be with Angle supports inserted inside the frames and fixed with screws. 5mm reflective glass (green tint) with edges grounded will be pasted with Structural Silicone adhesives (IS 995). Gap between Glass will be sealed with 12mm Thermocole BLACK.

LIST OF APPROVED MAKES OF MATERIALS

All materials to be used for furnishing & interior work is to be of following approved make, manufacturers other than listed below may also be Considered at the discretion of the Engineer in Charge / Architect.

MATERIALS

MAKE

Plywood, Block board	Merino, National, Bhutan Board
Locks with CP brass	Godrej, Golden, Ozone, Dorset
Soft board	Sitatex or equivalent.
Paints	ICI, Asian, Berger, Nerolac
Surface texture wall coating	Unitile, Heritage, Spectrum, Luxtire
Ceramic tiles	Kajaria, Bell., Johnson
Vitrified tiles	Asian, Kajaria, Johnson
Teak wood	C.P. teak 1 st class.
Wood preservative	Ascu PS-2 or equivalent.
Fire resistant coating	Viper or equivalent (certified by (C.B.R.T.))
GYPSUM PARTITION	INDIA GYPSUM ONLY
Hard ware fitting	Ebco, Everite, E.G. Doorset, For Doors
Glue	Fevicol, vamicol.
Glass	Modiguard, TATA, Saint Gobain
White vitreous chinaware	Parryware, Neycer, Hindustan . Adesive for
PVC flooring	Dunlop s-758, fevicol SR-998. Flush door
shutter.	Centuary/Sitapur /swastik /
Sink (stainless steel)	Nirali / diamond. Soil waste & R.W.P. RIF/BC/SRIF.
G.I. fitting	KS ENG. Works / R-mark K- mark.
G.I.pipes	Tata /JINDAL Hissar
Stone ware pipes & gully traps	Perfect / Bura.

GENERAL NOTES:

1. ONLY 'FIRST' QUALITY MATERIALS SHALL BE USED.
2. NRL RESERVES THE RIGHT TO CHOOSE ANY OF THE APPROVED MAKE / VENDORS AS PER THE VENDORS LIST.
3. IN CASE OF PRODUCTS NOT INDICATED IN THE VENDOR LIST, ONLY BIS MARKED PRODUCT SHALL BE USED.
4. SPECIFICATION OF MANUFACTURER'S ITEM SHALL BE CHECKED AGAINST TENDER ITEM/SPECIFICATIONS BEFORE SELECTING ANY PRODUCT OR BRAND NAME. IN CASE OF ANY DISCREPENCY, TENDER ITEM/SPECIFICATIONS SHALL PREVAIL, AND ANY SUCH BRAND OF ITEM SHALL NOT BE USED WHICH IS NOT CONFORMING TO TENDER SPECIFICATIONS EVEN IIF IT IS LISTED IN THIS VENDOR LIST.
5. IN CASE OF NON AVAILABILITY OF ANY MATERIAL AMONG APPROVED VENDORS/MAKES IN A PARTICULAR SITE/REGION, ALTERNATE VENDOR/MAKE CONFORMING TO IS/BS ETC SHALL BE USED SUBJECT TO APPROVAL BY OWNER.
7. IN CASE ANY PRODUCT NEITHER COVERED IN THE VENDOR LIST NOR HAVING BIS SPECIFICATIONS, THE CONTRACTOR SHALL SUBMIT THE PROPOSED PRODUCT ALONG WITH TECHNICAL LITERATURE/SPECIFICATIONS (AS/BID), TEST CERTIFICATES ETC. AND OTHER CREDENTIALS OF THE MANUFACTURER FOR OWNER'S APPROVAL.

***** End of SCC *****