

Construction of Truss less Store at Navi Mumbai GIS for long term preservation of GIS Spares.

TECHNICAL SPECIFICATION

1. The bidder should visit the site and ascertain the availability of material, site conditions and should quote their rates taking into account all the factors affecting the work.
2. Fly Ash bricks and cement concrete brick of average compressive strength of 50 kg/cm² shall be used as per CPWD specification/ relevant IS code.
3. CPWD specification shall be applicable for all schedule items.
4. All non-scheduled items shall be strictly as per item description of respective BOQ and instruction of Engineer-in-Charge. CPWD specifications shall be applicable for all non-schedule items, similar to schedule items. Where CPWD Specification of similar item(s) are not available, TS attached by POWERGRID/Manufacturer shall be applicable.
5. The record for consumption of anti termite solution shall be maintained at every stage and duly got certified by the Engineer-in-Charge.
6. All tests on materials and finished products as required in the field quality plan shall be arranged without any extra cost to POWERGRID.
7. All schedule items are based on DSR'2013. Any discrepancy in item description shall be corrected accordingly.
8. No materials will be supplied by POWERGRID. Item rates are inclusive of materials cost.
9. Wherever MS structural members are used it should be properly rolled & anti corrosive paint should be applied prior to applying Synthetic Enamel Paint.
10. Prior to concreting & removal of shuttering for any type of RCC work contractor has to inform the Engineer-in-charge well in advance.
11. All bought out items shall be approved by Engineer in charge prior to its procurement. All material should be of 1st quality.
12. Where ever wood is to be used, it should be well seasoned and chemically treated.
13. TMT reinforcement steel may be procured as per the provision given in SFQP for civil works.
14. OPC/PPC cement will be used in all activities, however special care shall be taken in case of PPC cement as per requirement of CPWD Specification.
15. TS of Rolling shutter is attached & work shall be carried out strictly in accordance with TS.
16. Specification of rolling shutter is as tabulated below:

Sr. No	COMPONENTS OF ROLLING SHUTTER	SEPCIFICATIONS
1	Slat Material (Shutter Curtain)	Slat material shall be min 1.0mm thk. steel slate (galvalume). The shutter curtain shall be constructed from single skinned galvalume steel laths. Each lath shall be retained by interlocking with each other. The material shall be finished with two coats of Polyurethane spray paint over one coat of epoxy primer.
3	Slat Profiles	100 mm to 120mm
4	Side Guide	GI Side Guide shall be min.75mm or as per manufacturer specification depending on size of rolling shutter and shall be especially design guides with wind locks for high wind velocity exposed shutters. PVC/nylofelt seals fitted on the shutter skin for friction less movement within the guides. Thickness of side guides shall be min. 2.0mm thick Galvanised Steel with integrated seals fitted to the lips of the guides to prevent metal-to-metal contact.
5	Bottom Profile	Bend-resistant double-skinned extruded Aluminium bottom profile or Galvanised Steel bottom profile suitable for the locking arrangement shall be provided. The bottom rail shall be fitted with extruded rubber bottom seal to prevent the entry of dust when it is fully closed.
7	Roller Shaft	Roller shaft shall be provided as per manufacture specification with heavy-duty mild steel strong suspension tubular shaft without spring suitable for opening as required.
8	Side Brackets	Should be of MS Plate 3mm to 10mm as per manufacturer specification.
9	Surface Finish & Painting	All the exposed surfaces shall be finished with two coats of Epoxy paint over one coat of approved primer as recommended by manufacturer. However, contractor may provide shutter finished with 2 coats of PU paints without any financial implication to POWERGRID.
10	Operations	The shutter shall be electrically operated with motor of suitable capacity along with hand chain or hand crank for manual operations. The shutter should have both facilities i.e. motor operated & manual operated.
11	Hood & Motor Cover	Shall be of Pressed galvalume steel hood box complete with reinforced bracket as per manufacturer specification. This should be minimum 1mm thick Galvalume sheet.
12	Drive Unit	Electric Motor should be either Single Phase or Three Phase depending upon the size of opening as per manufacturer specification.
13	Drive Type	Indirect /Direct Connecting Drive selection mode as per manufacturer specification. Drive should be with integral breaking system with Long life. System power supply shall be wired with industrial plug, push button integrated in the housing lid
14	Control Switch	Three station push button with dead man control switch which allows the shutter to move as long as the operating button is pressed.
15	Emergency operation manual	Emergency operation by means (manual operation) such as mechanical device, chain and crank operation for operating rolling shutters.