

Volume-II

NATIONAL AGRI-FOOD BIOTECHNOLOGY INSTITUTE (NABI)

(Department of Biotechnology,
Ministry of Science and Technology, Govt. of India)
Knowledge City, Sector-81, SAS Nagar, Mohali, Punjab

FINANCIAL BID DOCUMENT



Providing and fixing of tensile structured membrane fabric car parking covering, awning etc at Main Campus, NABI, Knowledge City, Sector-81, Mohali

TECHNICAL SPECIFICATIONS

1.0 STANDARD SPECIFICATIONS TO BE FOLLOWED

The work should be executed as per following CPWD specification and also the specification laid in tender document. In case, above specifications are not available for certain item, then the material should conform to ISI and BIS standards.

1.1 Civil Engineering Works

CPWD Specification 2009 Vol. I & II along with latest correction slips. These Specifications have replaced CPWD Specifications 1996 along with Correction Slips issued on them. These Specifications cover all types of Works. The specifications are available as a printed document issued by CPWD and also in soft copy PDF Format in CPWD website.

CIVIL WORKS

WORKMANSHIP FOR THE ENTIRE WORK.

The workmanship shall be best of its kind and shall conform to the specifications, as below or Indian Standard Specifications in every respect or latest trade practices and shall be subject to approval of the Engineer-in- Charge. All materials and/or Workmanship which in the opinion of the Engineer-in- Charge is defective or unsuitable shall be removed immediately from the site and shall be substituted with proper materials and/or workmanship forthwith.

1. Membrane Fabric Car parking:-

Providing and fixing of tensile structured car parking shed (size 32' x 12') with white coloured membrane pvc fabric (preconstraint 702 S2 of Ferrari or equivalent in Mehler) having weight of 750 gsm, minimum thickness 0.6 mm, tensile strength of 320 lbs/in, tear resistance of 85/80 lbs, flame retardant conforming to EN 1350-1, UV rays resistant. The membrane shall be fixed on deco spray painted main vertical MS structural hollow member of size 125mm OD 4.5 mm thick CHS , rafter of size 75 mm OD 3.6 mm thick CHS , purlin 60 mm 3 mm thick CHS all conforming to IS:1239 along with SS 304 wire rope 8 mm thick along with SS plates, bolts etc complete in all aspects. The structural members shall have minimum 50 micron spray paint coating.

The main vertical members of 125 mm OD shall be grouted in cement concrete 1:1.5:3 (1 cement:1.5 coarse sand:3- stone aggregate in equal ratios) with foundation of 2' x 2' x 1.5'. The existing kota stone shall be cut with floor cutters and re-laid with new kota stone pieces of 20 mm thickness including grouting of joints with white cement, pigment along with polishing etc. The whole structure should be able to sustain wind pressure of more than 200km/hr. The membrane fabric should have life span of over 10 years and should be weather proof. The joints, cutting shall be filled with suitable adhesive/arrangement. The cost shall be inclusive of all taxes, profits, labour etc. The joints of tensile members should be properly finished. The work shall be carried out to complete satisfaction of Engineer- in-charge and any part , if missed out in above specification, B.O.Q shall be provided within quoted rates. Nothing extra shall be paid. Test certificate for fabric membrane, tensile

structure members shall be provided.

2. Covered pathway with membrane fabric:-

Providing and fixing of tensile structured **covered path (3'7" x 18')** with white coloured membrane pvc fabric (preconstraint 702 S2 of Ferrari or equivalent in Mehler) having weight of 750 gsm, minimum thickness 0.6 mm, tensile strength of 320 lbs/in, tear resistance of 85/80 lbs, flame retardant conforming to EN 1350-1, UV rays resistant. The membrane shall be fixed on deco spray painted MS structural hollow member of rafter of size 75 mm OD 3.6 mm thick CHS , purlin 60 mm 3 mm thick CHS all conforming to IS:1239 along with SS 304 wire rope 8 mm thick along with SS plates, bolts, fastners for fixing on walls etc complete in all aspects. The structural members shall have minimum 50 micron spray paint coating. . The whole structure should be able to sustain wind pressure of more than 200km/hr. The membrane fabric should have life span of over 10 years and should be weather proof. The joints, cutting shall be sealed, woven to avoid breakage due to winds. The cost shall be inclusive of all taxes, profits, labour etc.

3. Door awning in basket shape with membrane fabric:-

Providing and fixing of **basket awning in doors (4' x 2')**with white coloured membrane pvc fabric (preconstraint 702 S2 of Ferrari or equivalent in Mehler) having weight of 750 gsm, minimum thickness 0.6 mm, tensile strength of 320 lbs/in, tear resistance of 85/80 lbs, flame retardant conforming to EN 1350-1, UV rays resistant along with 50 micron aluminium profile of size 60 x 25 mm along with end, joint profiles complete in all aspects.

NOTE: The sizes are tentative, minimum and if it is required to be increased based on functional requirement, site dimensions, aesthetics; same shall be done by contractor without any extra levy/charges. Bidders are advised to visit the site and satisfy themselves wrt site conditions, dimensions, fixing details. Shop drawings shall be provided by successful bidder for approval of Engineer- in-charge. All nuts/bolts shall be of SS 304 grade. In case of any contradiction between the specifications, the contractor shall take the prior approval of the Engineer- In - Charge before executing the same at site.

LIST OF MAKES TO BE ADOPTED

S.No	Item	Make
1.	Membrane Fabric	Preconstraint 702 S2 of Ferrari or equivalent in Mehler
2.	Tensile structure members	Jindal/Tata/Apollo/Swastic
3.	Steel rod/wire	Usha Martin

Note:- Any other material make not mentioned shall be ISI marked & got approved from Engg-in-charge

NAME OF WORK: - Providing and fixing of tensile structured membrane fabric car parking covering, awning etc at Main Campus, NABI, Knowledge City, Sector-81, Mohali

ABSTRACT SHEET

S.NO	PARTICULARS	AMOUNT (In INR)
1	ESTIMATED VALUE OF WORK (INCLUSIVE OF TAXES, LABOUR CESS ETC)	Rs 6,38,523/-
2	PERCENTAGE (% AGE) QUOTE PLUS/MINUS (+/ -) BY BIDDER ON ESTIMATED AMOUNT (IN FIGURES)	
3	PERCENTAGE (% AGE) QUOTE PLUS/MINUS (+/ -) BY BIDDER ON ESTIMATED AMOUNT (IN WORDS)	
4	NET AMOUNT AFTER UN-CONDITIONAL PERCENTAGE REBATE OR QUOTE ABOVE ESTIMATED VALUE ((IN FIGURES)	
5	NET AMOUNT AFTER UN-CONDITIONAL PERCENTAGE REBATE OR QUOTE ABOVE ESTIMATED VALUE ((IN WORDS)	

Stamp & Signatures of bidder

B.O.Q for providing and fixing of tensile structured membrane fabric car parking covering, awning etc at Main Campus, NABI, Knowledge City, Sector-81, Mohali

S.no	Description of Item	Unit	Qty	Rate	Amount
1	Providing and fixing of tensile structured car parking shed (size 32' x 12') with white coloured membrane pvc fabric (preconstraint 702 S2 of Ferrari or equilavent in Mehler) having weight of 750 gsm, minimum thickness 0.6 mm, tensile strength of 320 lbs/in, tear resistance of 85/80 lbs, flame retardant conforming to EN 1350-1, UV rays resistant. The membrane shall be fixed on deco spray painted main vertical MS structural hollow member of size 125mm OD 4.5 mm thick CHS , rafter of size 75 mm OD 3.6 mm thick CHS , purlin 60 mm 3 mm thick CHS all conforming to IS:1239 along with SS 304 wire rope 8 mm thick along with SS plates, bolts etc complete in all aspects. The structural members shall have minimum 50 micron spray paint coating. The main vertical members of 125 mm OD shall be grouted in cement concrete 1:1.5:3 (1 cement:1.5 coarse sand:3- stone aggregate) with foundation of 2' x 2' x 1.5' including top, bottom TMT bars of 8mm thickness @ 150mm centre to centre. The whole structure should be able to sustain wind pressure of more than 200km/hr. The membrane fabric should have life span of over 10 years and should be weather proof. The joints, cutting shall be filled with suitable adhesive. The cost shall be inclusive of all taxes, profits, labour etc. Sample picture of car shed is enclosed for ready reference with respect to shape, colour etc.	Complete Job	2	219283.2	438566.4

2	Providing and fixing of tensile structured covered path (3'7" x 18') with white coloured membrane pvc fabric (preconstraint 702 S2 of Ferrari or equilavent in Mehler) having weight of 750 gsm, minimum thickness 0.6 mm, tensile strength of 320 lbs/in, tear resistance of 85/80 lbs, flame retardant conforming to EN 1350-1, UV rays resistant. The membrane shall be fixed on deco spray painted MS structural hollow member of rafter of size 75 mm OD 3.6 mm thick CHS , purlin 60 mm 3 mm thick CHS all conforming to IS:1239 along with SS 304 wire rope 8 mm thick along with SS plates, bolts, fastners for fixing on walls etc complete in all aspects. The structural members shall have minimum 50 micron spray paint coating. . The whole structure should be able to sustain wind pressure of more than 200km/hr. The membrane fabric should have life span of over 10 years and should be weather proof. The joints, cutting shall be sealed, woven to avoid breakage due to winds. The cost shall be inclusive of all taxes, profits, labour etc.	Complete Job	2	36798.46	73596.924
3	Providing and fixing of basket awning (approx size 4' x 2') with white coloured membrane pvc fabric (preconstraint 702 S2 of Ferrari or equilavent in Mehler) having weight of 750 gsm, minimum thickness 0.6 mm, tensile strength of 320 lbs/in, tear resistance of 85/80 lbs, flame retardant conforming to EN 1350-1, UV rays resistant along with 50 micron aluminium profile of size 60 x 25 mm along with end, joint profiles complete in all aspects.	Complete Job			
			8	15795.00	126360.00
	Estimated Amount inclusive of taxes, profits, wastage, transportation, labour etc				638523.32

NOTE: - Payment shall be released item wise based on actual work done at site as examined by Engineer- In- Charge.

Signature/Stamp of Bidder