Birla Industrial & Technological Museum



 $(National\ Council\ of\ Science\ Museums,\ Ministry\ of\ Culture,\ Govt.\ of\ India)$



19A, Gurusaday Road, Kolkata - 700 019

Sub: Installation of frameless glass covering with door at Indira Gandhi Planetarium, Patna.

Sl. No.	Description of item	Qty.	Unit	Rate	Amount	Reference
1.0	Design, supply & installation of suspended Spider Glazing system					
	for frameless glass faced with single leaf glass door, designed to					
	withstand the wind pressure as per IS 875 (Part-III) & fulfilling					
	AS1288 2006 codal requirements. The Suspended System held with					
	Spider Fittings of SS-316 Grade Steel of approved manufacturer					
	with glass panel having 12 mm thick clear toughened glass held					
	together with SS-316 Grade Stainless steel Spider & bolt assembly					
	with toughened/ laminated glass fins of required thick. Glass fins as					
	stabilizers shall be used at each vertical joint to provide lateral					
	stiffness against wind loading. The spider fin fittings shall have a					
	stream line design with twirl arm for high strength performance and					
	better aesthetics. The spider shall be manufactured by investment					
	casting process of grade SS-316 as per EN norm. The Glass fins and					
	glass panel assembly shall be connected to Slab/ beams by means of					
	SS- 316 Grade stainless steel brackets & Anchor bolts and at the					
	bottom using SS channel of 50x25x2mm using fastener & anchor					
	bolts, non staining weather sealants of approved make, Teflon/ nylon					
	bushes and separators to prevent bi-metallic contacts, all complete to					
	perform as per specification and approved drawings. All spider					
	fittings should be designed to support the weight of the glass by					
	direct bearing on the bolts and the complete system to be designed to					
	accommodate thermal expansion & seismic movements etc.					
	The joints between glass panels (6 to 8 mm) and gaps at the					
	perimeter & in U channel of the assembly to be filled with non					
	staining weather sealant, so as to make the entire system fully water					
	proof & dust proof. One single leaf glass door of 1.2 m opening with					
	patch fittings such as PT 40, 10, US 10, PT 24, pull handle 1200 x					
	38 and BTS 75V floor spring conforming to DIN EN 1154 in long-					
	time test/ 500000 operating cycle has to be provided. The rate shall include all design Engineering and short drawing including approval					
	include all design, Engineering and shop drawing including approval					
	from structural designer, labour, T&P, scaffolding, other incidental charges including wastage, enabling temporary services all fitting					
	fixers, nut bolts, washer, Buffer plates, fastener, anchors, SS channel,					
	laminated glass etc. all complete. For the purpose of payment, actual					
	elevation area of Glazing including thickness of joints and the					
	portion of Glass panel inside the SS channel shall be measured. All					
	hardware accessories & spider fittings shall be of <i>DORMA</i> /					
	AUSTAVISION/ SADEV/ STANLEY make.					
	HODITY BIDLY BITTELL MARC.	65	Sqm.	8,500.00	5 52 500 00	Marker Rate
2.0	Applying Interior grade Acrylic Primer of approved quality and	0.5	equi.	0,500.00	5,52,500.00	
2.0	brand on plastered or concrete surface in old or new work to receive					
	Distemper/ Acrylic emulsion paint including scraping and preparing					
	the surface thoroughly, complete as per manufacturer's specification					PCSR'17
	and as per direction of the EIC at any floor.					Page-195
	Water based interior grade Acrylic Primer <i>One coat</i> .	50	Sqm.	30.80	1,540.00	Item no:7(a)(i)
3.0	Applying Acrylic Emulsion Paint, having VOC (Volatile Organic	- 50	əqiii.	20.00	1,5 10.00	
3.0	Compound) content less than 50 grams/ liter, of approved make and					DSR'21
	brand (Asian Paints Apcolite/ ICI Dulux Super Clean 3 in 1/ Berger					Page-286
	Easy clean) on walls, columns, ceiling etc. including applying					Item no:13.82
	additional coats wherever required, to achieve even shade and colour.					Less GST &
	Two or more coats with Luxury Quality.	50	Sqm.	102.59	5,129.50	
	7 C V.	50	~q	102.37	5,127.50	0

Sl. No.	Description of item	Qty.	Unit	Rate	Amount	Reference
	Providing and applying white cement based putty of average					DSR'21
	thickness 1 mm, of approved brand and manufacturer, over the					Page-286
	plastered wall surface to prepare the surface even and smooth					Item no:13.80
	complete.					Less GST &
		50	Sqm.	109.49	5,474.50	LWC
		D -		£ 411- =		
Basic value of the work =					5,64,644.00	
Add GST @18% over basic value of work =					1,01,636.00	
Cost of work including GST =					6,66,280.00	
Add Labour welfare cess @1% over cost of work including GST =					6,663.00	
Gross value of work including GST @18% & LWC @1% =					6,72,943.00	

NOTE:

- 1 Tenderers should visit the site before quoting the rate to understand the nature of work and condition of the site.
- 2 Rates shall be quoted inclusive of all materials, **wastage**, labour, shifting charges, **taxes & duties** etc. required for this job. No additional payment shall be done by the BITM for this purpose.
- 3 The work shall be required to carry out without obstructing the visitor's movements and may also be required to carry out beyond office hours (if required) for which no additional payment shall be made.
- 4 The work will be carried out after following all respective precautionary measure and safety rules. Expenditure towards insurance coverage for the labourers working at site has to be included in the rate.
- 5 The successful tenderer has to submit the design, engineering and shop drawing including approval from structural designer before execution at site. No additional payment shall be done by the BITM for this purpose.
- 6 All the Exhibits & equipments installed in the gallery shall be covered with polythene sheets properly and/or may be needed to shift at the own cost of successful tenderer.
- 7 Regarding the work directives of the Engineer-in-Charge shall be final and binding.
- 8 All materials must be approved by the Engineer-in- Charge before supplying at site. List of Approved materials:
 - i) Clear Glass: Saint-Gobain, Modiguard, Asahi (AIS).
 - ii) Hardware accessories & spider fittings: DORMA/ AUSTAVISION/ SADEV/ STANLEY.

Signature of the Contractor