



**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
1.0	<p>Design, supply &amp; 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) &amp; fulfilling ASI288 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 &amp; 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 &amp; Anchor bolts and at the bottom using SS channel of 50x25x2mm using fastener &amp; 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 &amp; seismic movements etc.</p> <p>The joints between glass panels (6 to 8 mm) and gaps at the perimeter &amp; in U channel of the assembly to be filled with non staining weather sealant, so as to make the entire system fully water proof &amp; 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 shop drawing including approval from structural designer, labour, T&amp;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 &amp; spider fittings shall be of <b>DORMA/ AUSTAVISION/ SADEV/ STANLEY</b> make.</p>	65	Sqm.	8,500.00	5,52,500.00
2.0	<p>Applying Interior grade Acrylic Primer of approved quality and 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 and as per direction of the EIC at any floor.</p> <p>Water based interior grade Acrylic Primer <b>One coat.</b></p>	50	Sqm.	30.80	1,540.00
3.0	<p>Applying Acrylic Emulsion Paint, having VOC (Volatile Organic Compound ) content less than 50 grams/ liter, of approved make and brand (Asian Paints Apcolite/ ICI Dulux Super Clean 3 in 1/ Berger Easy clean) on walls, columns, ceiling etc. including applying additional coats wherever required, to achieve even shade and colour.</p> <p><b>Two or more coats</b> with Luxury Quality.</p>	50	Sqm.	102.59	5,129.50

Sl. No.	Description of item	Qty.	Unit	Rate	Amount
4.0	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.	50	Sqm.	109.49	5,474.50
<b>Basic value of the work =</b>					<b>5,64,644.00</b>
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
<b>Gross value of work including GST @18% &amp; LWC @1% =</b>					<b>6,72,943.00</b>

**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.

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Signature of the Contractor