

# TENDER NO.: 01

**BHAILALBHAI & BHIKHABHAI INSTITUTE OF TECHNOLOGY(GIA)**

**P.O Box No.3, Vallabh Vidyanagar-388120, Dist.: Anand (Gujarat)**

**Phone & Fax: (02692)237240, E-mail: [principal@bbit.ac.in](mailto:principal@bbit.ac.in)**

**Website: [www.bbit.ac.in](http://www.bbit.ac.in)**

**PAINTING WORK(INTERIOR) GROUND FLOOR, ACEDEMIC BUILDING (B – BLOCK)**

**OF B & B INSTITUTE OF TECHNOLOGY(GIA),**

**AT: VALLABH VIDYANAGAR. YEAR: 2018-19**

Name of Tenderer: \_\_\_\_\_

Address: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Date of Submission: \_\_\_\_\_

Sealed tenders are invited from the contractors with sound technical and financial capabilities and possessing the required equipment's for the following work.

Name of work	<b>PAINTING WORK(INTERIOR) GROUND FLOOR, ACEDEMIC BUILDING (B – BLOCK) OF B &amp; B INSTITUTE OF TECHNOLOGY(GIA). AT: VALLABH VIDYANAGAR. YEAR: 2018 – 19.</b>
Time Limit	45 days after issuing the work order.
Tender Fee	Rs. 600 in in form of demand draft only from any Nationalized bank in favor of <b>Principal, BBIT</b> , payable at V. V. Nagar. (NON-REFUNDABLE)
Earnest Money	Rs. 3500/- to be refunded after deposition of Security Deposit in form of demand draft from any Nationalized bank in favor of <b>Principal, BBIT</b> , payable at V. V. Nagar. (No interest will be paid). Tenders without EMD will be Rejected.
Security Deposit	2.5% of the contract value in form of demand draft only from any Nationalized bank in favor of <b>Principal, BBIT</b> , payable at V. V. Nagar. (To be refunded after 12 months from completion) (No Interest will be paid)
Retention Money	2.5% of the bill value deducted from final bills. (To be refunded after 12 months from date of completion) (No Interest will be paid)
Defect liability period	12 months from the date of completion.

The last date for submitting the sealed tender by person / R.P.A.D /Speed Post is: 22/06/2018, 16:00 HOURS.

The **Principal, BBIT** reserves all right to reject any or all the tenders without giving any reason thereof.

Contractors' Name: \_\_\_\_\_

Contractors' Signature: \_\_\_\_\_ Stamp: \_\_\_\_\_

Contractor's Name & Signature

**BHAILALBHAI & BHIKHABHAI INSTITUTE OF TECHNOLOGY(GIA)****P.O Box No.3 Vallabh Vidyanagar-388120, Dist.: Anand (Gujarat), Phone & Fax: (02692)237240,****E-mail: [principal@bbit.ac.in](mailto:principal@bbit.ac.in) Website: [www.bbit.ac.in](http://www.bbit.ac.in)****TENDER FORM (SR NO.: 01)****NAME OF WORK: - PAINTING WORK (INTERIOR) GROUND FLOOR, ACEDEMIC BUILDING (B – BLOCK) OF B & B INSTITUTE OF TECHNOLOGY(GIA). AT: VALLABH VIDYANAGAR. YEAR: -2018-19**

<b>Sr. No.</b>	<b>Description</b>	<b>Quantities estimated but may be more or less</b>	<b>Unit</b>	<b>Rate with Labour and Material (Rs./Sq.Mt.)</b>	<b>Total Amount (Rs)</b>
1.0	White Washing with lime on wall/Celling surface (two coats) give an even shade including scraping and thoroughly brooming the surface to remove all dirt, dust, mortar drops and other foreign matter as directed by Engineer In-charge.	1859.72	Sq. Mt.		
2.0	Distempering (Two coats) with Acrylic washable distemper of approved brand (1st quality) with necessary scraping, laphi touching and of required shade on wall surface to give an even shade, after thoroughly brushing the surface clean of all grease dirt, loose pieces of scale as directed by engineer In-Charge.	4955.86	Sq. Mt.		
3.0	Painting two coats (excluding priming coat) on previously painted steel and other metal surface with enamel paint (1st quality) to give an even shade including cleaning the surface of all dirt, dust and other foreign matter as directed by engineer In-Charge.	316.22	Sq. Mt.		
4.0	Painting two coats (excluding priming coat) on previously painted wood and wood base surface with enamel paint (1 <sup>st</sup> quality) to give an even shade cleaning including of all dirt, dust and other foreign matter as directed by engineer In-Charge.	1067.45	Sq. Mt.		
5.0	Painting two coats (excluding priming coat) on previously painted wall surface with enamel paint (1 <sup>st</sup> quality) to give an even shade cleaning of all dirt, dust and other foreign matter including with necessary scraping and laphi touching as directed by engineer In-Charge.	392.79	Sq. Mt.		
<b>Total in Words :</b>				<b>Total :</b>	

Note: All Detail Specifications and SOR for above mentioned items are attached in Annexure – II

Issued Person:

Agency Name:

Date:

Sign &amp; Stamp:

Contractor's Name &amp; Signature

## **Terms & Conditions:**

**Rates:** Inclusive of GST. & other Taxes.

**Note:**

- All work shall be carried out as per public works Department Handbook and other specifications of Division or as directed.
- Tenders are requested to visit the site of work for further / more details before quoting the rates.
- Quantity of work may increase or decrease up to any extent as per the requirement. Contractor must carry out the work as per instruction of principal of BBIT at approved rates.
- Rates quoted include clearance of site (Prior commencement of work and as its close) in all respects and hold good for work under all conditions, site, moisture, weather etc.
- In case of any discrepancy / dispute, the decision of principal, BBIT will be considered as final.
- Contractor must submit material consumption statement along with the all running bills.
- Contractor is bound to produce the bill of purchase of material with batch number with final bill.
- Contractor must submit empty buckets in BBIT College Store.

## **SPECIFICATIONS OF MATERIALS**

### **M-1 WATER:**

- 1.1** Water shall not be salty brackish and shall be clean, reasonably clear and free objectionable quantities of silt and traces of oil and injurious alkalis, salts, organic matter and other deleterious material which will either weaken the mortar of concrete or cause efflorescence or attack the steel in R.C.C. Container for transport, storage and handling of water shall be clean. Water shall conform to the standard specified in IS 456-1978.
- 1.2** If required by the Engineer-in-Charge it shall be tested by comparison with distilled water. Comparison shall be made by means of standard cement tests for soundness, time of setting and mortar strength as specified in IS 269-1976. Any indication of unsoundness, change in time of setting by 30 minutes or more or decrease of more than 10 per cent in strength, of mortar prepared with water sample when compared with the results obtained with mortar prepared with distilled water shall be sufficient cause for rejection of water under test.
- 1.3** Water for curing mortar, concrete or masonry should not be too acidic or too alkaline. It shall be free of elements which significantly affect the hydration reaction or otherwise interfere with the hardening of mortar or concrete during curing or those which produce objectionable stains or other unsightly deposits on concrete or mortar surfaces.
- 1.4** Hard and bitter water shall not be used for curing.
- 1.5** Potable water will generally be found suitable for curing mortar or concrete.

### **M-2 Lime:**

- 2.1** Lime shall be hydraulic lime as per IS 712-1973. Necessary tests shall be carried out as per IS 6932 (Parts I to X) 1973.
- 2.2** The following field tests for limes are to be carried out:
  - (1) A very rough idea can be formed about the type of lime by its visual examination i.e. fat lime bears pure white colour, lime in form of porous lumps of dirty white colour indicates quick lime, and solid lumps are the un-burnt lime stone.
  - (2) Acid tests for determining the carbonate content in lime. Excessive amount of impurities and rough determination of class of lime.
- 2.3** Storage shall comply with IS 712-1973. The slaked lime, if stored, shall be kept in a weather proof and damp proof shed with impervious floor and sides to protect it against rain, moisture, weather

and extraneous materials mixing with it. All lime that has been damaged in any way shall be rejected and all rejected materials shall be removed from site of work.

**2.4** Field testing shall be done according to IS1624-1974 to show the acceptability of materials.

**M- 3 Paints:**

**3.1 (A) Oil paints:**

**3.1.1** Oil paints shall be of the specified colour and as approved. The ready mixed paints shall only be used. However, if ready mixed paint of specified shade or tint is not available white ready mixed paint with approved strainer Will be allowed. In such a case, the contractor shall ensure that the shade of the paint so allowed shall be uniform.

**3.1.2** All the paints shall meet with the following general requirements:

(i) Paint shall not show excessive setting in a freshly opened full can and shall easily be dispersed with a paddle to a smooth homogeneous state. The paint shall show no curdling, Levering, caking or color separation and shall be free from lumps and skins.

(ii) The paint as received shall brush easily, possess good levelling properties and show no running or sagging tendencies.

(iii) The paint shall not skin within 48 hours in three quarters filled closed container.

(iv)The paint shall dry to a smooth uniform finish free from roughness, grit unevenness and other imperfections.

**3.1.3** Ready mixed paint shall be used exactly as received from the manufacturers and generally according to their instructions and without any ad mixtures whatever.

**3.2 (B) Enamel paints:**

**3.2.1.** The enamel paint shall satisfy in general requirements in specification of oil paints, Enamel paint shall conform to I.S.2933-1975.

## **SPECIFICATION FOR PAINT WORK**

**1.0 White Washing with lime on decorated wall surface (two coats) to give an even shade including thoroughly brooming in the surface to remove dirt, dust, mortar drops and loose scales of lime wash and other foreign matter as directed by Engineer In-charge.**

### **1.1 Materials:**

**1.1.1** The clear coat shall be made from glue and boiling water by mixing 1 Kg. mixture shall be suitably tinted where required for use under coloured distemper if directed. Glue shall be confirming to IS 852-1969 (Specification for Animal glue).

**1.1.2** Lime shall conform to M-2 used and white in colour shall be confirming to IS 712-1973 & Water shall conform to M-1. Best quality of gum shall be used in the preparations of white wash. Ultramarine blue or Indigo. This shall conform to I.S. 55-1970 for points and shall be used /or preparation of white wash, Pigments. Mineral colours, not affected by lime shall be used in preparing colour wash.

### **1.2 Workmanship:**

**1.2.1 Preparation of white wash solution:** (Surface already white or coloured) The fat lime shall be slaked as site and shall be mixed and stirred with about five liters of water for kg. of unslaked lime-to make a thin cream. This shall be allowed to stand for a period of 24 hours and then shall be screened through a clean coarse cloth, 4 Kg. of gum dissolved in hot water shall be added to each cubic meter of lime cream. Small quantity of ultramarine blue (Up to 3 gms. per kg. of lime) shall also be added to the last two coats of white wash solution and the whole solution shall be stirred thoroughly before use.

#### **1.2.2 Preparation of surface:**

**1.2.2.1** The surface shall be thoroughly cleaned of all dust, dirt, mortar cropping's and other foreign matter before white wash is to be applied.

**1.2.2.2** The surface spoiled by smoke soot shall be scrapped with steel-wire brushes or steel scrapers or shall be rubbed with over-burnt surkhi or brick bats. The surface shall be then broomed to remove all dust, dirt and shall be washed-with clean water.

**1.2.2.3** Oil or grease spots shall be removed by suitable chemical and smooth surface shall be rubbed with wire brushes.

**1.2.2.4** All unsound portion of the surface plaster shall be removed to full depth of plaster in rectangular patches and plastered again after raking the masonry joints properly. Such portion shall be wetted and allowed to-dry. They shall then be given one coat of white wash.

**1.2.2.5** All unnecessary nails shall be removed, the holes, cracks, patches etc. shall be made good with material similar in composition to the surface to be prepared.

### **1.2.3 Scaffolding:**

**1.2.3.1** Wherever scaffolding is necessary it shall be erected in such a way that as far as possible on part of scaffolding shall rest against the surface to be white or coloured washed. A properly secured

strong and well tied suspended platform (Joola) may be used for white washing. Where ladders are used, pieces of old gunny bags shall be tied at top and bottom to prevent scratches to the floors and walls. For white Washing of ceilings, proper stage scaffolding shall be erected where necessary.

### **1.2.4 Application of white wash:**

**1.2.4.1** On the surface so prepared the white wash shall be applied with 'Moon' brush. The first stroke of the brush shall be from top to downwards and from bottom to upwards and similarly one stroke from the right another from the left, over the first stroke brush before it dries. This will form one coat. Each coat shall be allowed to dry before and uniform finish free from brush marks and it should not come off easily when rubbed with finger.

**1.2.4.2** Splashing and dropping if any on the doors and windows ventilators etc. shall be removed and the surface cleaned.

**1.2.4.3** priming and Alkali resistant treatments, scraping of surface washing etc. surface spoiled by smoke soot removed of oil and grease spots, treatment for infection with efflorescence moulds moss, fungi, algae and lichens and patch repairs to plaster wherever done shall not be paid extra.

### **1.3 Mode of measurements & payment:**

**1.3.1** All the work shall be measured in the decimal system as under.

(a) Dimensions shall be measured to the nearest 0.01 m.

(b) Area in individual item shall be worked out to the nearest 0.01 sq. m.

All the work shall be measured in sq. mt. Deductions for jambs. soffits. sills etc. for openings not exceeding 0.5 sq. mt. each in area, for ends of joists, posts, beams, girders, steps etc. not exceeding 0.5 sq. mt. each in area and for openings exceeding 0.5 sq. mt. and not exceeding 3.0 sq. mt. each in area, deductions and additions shall be made as under.



- 1.3.2** No deductions shall be made for ends of joists, beams, pots, etc. and openings not exceeding 0.5 sq. mt. each. No addition shall be made for reveals, jambs, soffits, sills etc. of these openings not for finish around ends of joints, beams, posts etc.
- 1.3.3** No deductions for openings exceeding 0.5 sq.mt. but not exceeding 3 sq. mt. each shall be made as follows and no addition will be made for reveals. jambs, soffits etc. of these openings:
- (a) When both the faces of walls are provided with-fifth, deduction shall be made for one face only.
- (b) When each face of wall is provided with different finish, deduction shall be made for that Side of frame for door, windows. etc. on which width of reveals is less than that of the other side. Where width of reveals on both faces of wall are equal, deduction of 50% of area of opening of each face shall be made from total area of finish.
- (c) When only one face of Wall is treated and the other face is not treated full deduction shall be made if the width of reveal on the treated side is less than that each untreated side. but if the width of the reveal is equal or more than on. the untreated side neither deductions nor additions to be made for reveals. jambs. soffits, sills etc.
- 1.3.4** In case of area of openings exceeding 3 sq. mt. each. deductions shall be made for openings but jambs, soffits sills shall be measured.
- 1.3.5** No deductions shall be made for attachment such as easing. conducts. pipe, electric wiring and the like.
- 1.3.6** Corrugated surfaces shall be measured flat as fixed and not girth. The quantities so measured shall be increased by the following percentage and the resultant shall be included with the general areas:
- (a) Corrugated steel sheets .....14%
- (b) Corrugated AC. sheets ..... 20%
- (c) Semi conjugated A.C. Sheets..... 10%
- (d) Nainital pattern roof (Plain sheeting sheets). ..... 10%
- (e) Nainital pattern roof (with corrugated sheets): ..... 25%
- 1.3.7** Cornices and other wall features. when they are not picked out in a different finish/colour shall be girthed and included in the general area.
- 1.3.8** The rate shall include the cost of all materials, labor, scaffolding, protective measures etc. involved in all the operations described above.
- 1.3.9** The rate shall be for a unit of One sq. meter.

**2.0 Distemping (Two coats) with Acrylic washable distemper of approved brand and manufacture (1st quality) on decorative wall surface with necessary scraping, laphi touching and of required shade on wall surface to give an even shade after thoroughly brushing the surface clean of all grease, dirt, loose pieces of scale and including distemping with acrylic washable distemper of preparing the surface even and sand papered smooth as directed by engineer In-Charge.**

**2.1 Materials:**

**2.1.1** Acrylic washable distemper (1<sup>st</sup> quality) shall be of approved brand and manufacture. The distemper shall be of required colour and shade and the same shall confirm to IS 428-1960.

**2.2 Workmanship:**

**2.2.1 Scaffolding:**

Where scaffolding is required, it shall be erected in such a way that as far as possible no part of scaffolding shall rest against the surface to be distemped. A properly secured and well tied suspended platform (Joola) may be used for distemping. where ladders are used, pieces of old gunny bags shall be tied at top and bottom to prevent scratches to the walls and floors. For distemping to ceiling, proper stage scaffolding shall be erected where necessary.

**2.2.2 Preparation of surface:**

**2.2.2.1** The undecorated surface to be distemped shall be thoroughly brushed from dust, dirt, grease, mortar dropping and other foreign matter and sand papered smooth. New plaster surface shall be allowed to dry for at least 2 months before applications of distempers.

**2.2.2.2** All unnecessary nails shall be removed. Pitting in plaster shall be made good with plaster again with a fine grade sand paper and made smooth. A coat of distemper shall be applied over the

patches. The surface shall be allowed to dry thoroughly before the regular coat of distemper is allowed. The surface affected by molds, moss, fungi, algae lichens, efflorescence etc. shall be treated in accordance with IS 2395(Part 1) 1996. Before applying distemping, any unevenness shall be made good by applying putty made of plaster of pairs mixed with water on entire surface including filling up the undulation and then sand papering the same after it is dry.

### **2.2.3 Preparation of Acrylic washable distemper:**

**2.2.3.1** The distemper shall be diluted with water or any other prescribed thinner in a manner recommended by the manufacturer only. Sufficient quantity of distemper required for a day's work shall be prepared.

### **2.2.4 Application of Distemper coat:**

**2.2.4.1** For undecorated surfaces, after the primer coat is dried for at least 48 hours, the surface shall be lightly sand prepared to make it smooth for receiving the distemper, taking care not to rub out priming coat. All loose particles shall be dusted off after rubbing. Minimum two coats of distemper shall be applied with brushes in horizontal strokes followed immediately by vertical strokes which together shall constitute one coat. The subsequent coats after a time interval of at least 24 hours between consecutive coats to permit proper drying of the proceeding coat. The finished surface shall be even and inform without patches, brush marks, distemper drops etc.

**2.2.4.2** Sufficient quantity of distemper shall be mixed to finish one room at a time. The application of a coat in each room shall be finished in one operation and no work shall be striated in any room which cannot be completed on the same day.

**2.2.4.3** 15cm. double bristled distemper brush shall be used. After day's work brushes shall be thoroughly washed in hot water with soap solution and hung down to dry. Old brushes which are dirty and caked with distemper shall not be used on the work.

### **2.2.5 Protective measurements:**

**2.2.5.1** The surfaces of doors, windows, floors, articles of furniture etc. and such other parts of the buildings as are not to be distempered shall be protected from being splashed upon. Such surfaces shall be cleaned of distemper splashes if any.

### **2.3 Mode of measurements and Payment:**

**2.3.1** priming coat of distemper primer (if), scaping of surface spoiled by strunk soots, removal of oil and grease spots, treatment for infraction of effloresces, molds moss. fungi, algae and lichen and patch repairs to plaster shall be included in this item for which nothing extra shall be paid.

**2.3.2** All the work shall be measured net in the decimal system as in place subject to the following limits unless otherwise stated here in after:

(a) Dimensions shall be measured to the nearest 0.01 m.

(b) Area in individual items shall be worked out to the nearest 0.01 sq. m.

All work shall be made for ends of joints, beams, posts etc., and openings, not exceeding 0.5 sq. mt. each and no addition shall be made for reveals, jambs, soffits, sills etc. of these openings not for finish around ends of joints, beams. posts etc.

**2.3.3** Deductions of opening exceeding 0.5 sq. m. but not exceeding 3 sq. m. each shall be made as follows and net addition shall be made for reveals, jambs, soffits etc. of these openings:

(a) When both the faces of the wall are provided with same finish, deductions shall be made for one face only.

(b) When each face of wall is provided with different finish, deduction shall be made for that side of frame for doors, windows etc. on which width of reveals is less than that of the other side but no deduction shall be made on the other side. Where the width of reveals on the both the faces of wall are equal, deduction of 50% of area of opening on each face shall be made from area of finish.

(c) When only one face of wall is treated and the other face is not treated, full deductions shall be made if the width of the reveal on treated side is less than that on untreated side but if the width of the reveal is equal or more than that on untreated side neither deductions nor additions to be made for reveals, jambs, soffits, sills etc.

**2.3.4** In case of opening of area exceeding 3.0 sq. m. each deduction shall be made for openings but jams, sills and soffits shall be measured.

**2.3.5** No deductions shall be made for attachments such as casings, conduits, pipes, electric wiring the like.

**2.3.6** Item includes removing nails, making good holes, patches with materials similar in composition of distemper.

**2.3.7** The rate includes cost of all materials, labors, scaffolding, protective measures etc. involved in all the operations described above. This shall also include conveyance, delivery, handing, unloading, storing work etc.

**2.3.8** The rate shall be for a unit of one sq. meter.

**3.0 Painting two coats (excluding priming coat) on previously painted steel and other metal surface with enamel paint (1<sup>st</sup> quality) to give an even shade including cleaning the surface of all dirt, dust and other foreign matter as directed by engineer In-Charge.**

**3.1 Materials:**

**3.1.1** The Enamel paint shall conform to M-3(B) and satisfy in general requirements in specification of oil paint. Enamel paint shall be confirmed to I.S. 2933-1975.

**3.2 Workmanship:**

**3.2.1 General:**

**3.2.1.1** The materials required for work of painting work shall be obtained directly from approved manufactures or approved dealer and brought to the site in maker's drums, kegs. etc. with seal unbroken.

**3.2.1.2** All materials not in actual use shall be kept properly protected, lids of containers shall be kept closed and surface of paint in open or partially open containers covered with a thin layer of turpentine to prevent formation of skin. The materials which have become state or flat due to improper and long storage shall not be used. The paint shall be stirred thoroughly in its container before pouring into small containers. While applying also, the paint shall be continuously stirred in smaller container. No left-over paint shall be put back into stock tins. When not in use the containers shall be kept property closed.

**3.2.1.3** If for any reasons, things are necessary, the brand of thinner recommended by the manufacturer shall be used.

**3.2.1.4** The surface to be painted shall be thoroughly cleaned and dusted. All rust, dirt and grease shall be thoroughly removed before painting is started. No painting on exterior or other exposed part of the work shall be earned out in wet damp or otherwise unfavorable weather and all the surfaces shall be thoroughly dry before painting work is started.

### **3.2.2 Application of Paint:**

- 3.2.2.1** Brushing operations are to be adjusted to the spreading capacity advised by the manufacture of paint. The paint shall be applied evenly and smoothly by means of crossing and laying off. The crossing and laying off consists of covering the area over with paint, brushing the surface hard for the first time over and then brushing alternately in opposite directions two or three times and then finally brushing lightly in a direction at right angles to the same. In this process, no brush marks shall be left after the laying off is finished. The full process of crossing and laying off will constitute on one coat.
- 3.2.2.2** Each coat shall be allowed to dry completely and lightly rubbed with very fine grade of sand paper and loose particles brushed off before next coat is applied. Each coat shall vary slightly in shade and shall be got approved from Engineer-in-charge before next coat is started.
- 3.2.2.3** Each coat the last shall be lightly rubbed down with sand paper of fine pumice stone and cleaned of just before the next coat is applied. No hair marks from the brush of clogging of paint puddles in the corners of panels, angles of mouldings etc. shall be left on the work.
- 3.2.2.4** Special care shall be taken while painting over bolts, nuts, rivets, overlaps etc. Approved best quality brushes shall be used.

### **3.3 Mode of Measurements and Payments:**

- 3.3.1** The new steel and other metal surface shall be measured under this item.
- 3.3.2** All the work shall be measured net in the decimal system, as executed subject to the following limits unless otherwise stated here in after.
- (a) Dimensions shall be measured to the nearest 0.01 meter.
  - (b) Areas shall be worked out to the nearest 0.01 sq. meter.
- 3.3.3** No deductions-shall be made for openings not exceeding 0.5 sq.mt. each and no addition shall be made for painting to beddings, mouldings, edges. jambs, soffits, sills etc. of such opening.
- 3.3.4** In case of fabricated structural steel and iron work, priming coat of paint shall be included with fabrication. In Case of trusses if measured in sq. compound girders, stanchions, lattices, grader and similar work, actual area shall be measured in sq. and no extra shall be paid for painting on bolts heads, nuts. washers etc. No addition shall be made to the weight calculated for measurements of steel and iron works for paint applied on shop or at site.

**3.3.5** The different surfaces shall be grouped into one general item, areas of uneven surfaces being converted equivalent-plain areas in accordance with the table given as per Annexure-I for payment.

**3.3.6** The rate shall be for a unit of One sq. meter.

**4.0** **Painting two coats (excluding priming coat) on previously painted wood and wood base surface with enamel paint (1<sup>st</sup> quality) to give an even shade cleaning including of all dirt, dust and other foreign matter as directed by engineer In-Charge.**

**4.1 Materials:**

**4.1.1** The enamel paint shall conform M-3(B) to I.S. 133-1975

**4.2 Workmanship:**

**4.2.1** The relevant specification of item no. 3.2 shall be followed for general and application of paint, except that the enamel paint shall be used for painting on new wood/wood-based surfaces.

**4.2.2** In painting doors and windows, the putty, round the glass panes also be painted but care shall be taken to see that no paint, stain etc. are left on the glass. Top of shutters and surfaces in similar hidden locations shall not be left out in painting.

**4.3 Mode of Measurement and Payment:**

**4.3.1** The relevant specifications of item no 3.3 shall be followed, for mode of measurement and payments. The rate excludes cost of priming coat.

**4.3.2** The rate shall be for a unit one sq. meter.

**5.0** **Painting two coats (excluding priming coat) on previously painted wall surface with enamel paint (1<sup>st</sup> quality) to give an even shade cleaning of all dirt, dust and other foreign matter including with necessary scraping and laphi touching as directed by engineer In-Charge.**

**5.1 Materials:**

**5.1.1** Water shall be conforming to M -1. The enamel paint shall conform M-3(B), to I.S. 133-1975.

## **5.2 Workmanship:**

**5.2.1** The relevant specification of item no. 4.2 shall be followed for general and application of paint, except that the enamel paint shall be used for painting on new surfaces.

### **5.2.3 Preparation of Mix:**

**5.2.3.1** This shall be done as per manufacturer's instructions. the thinning of emulsion is to be done with water and not with turpentine. The quantity of thinner to be added shall be as per manufacture instructions.

### **5.2.4 Application:**

**5.2.4.1** Before pouring into small container for use, the paint shall be stirred thoroughly in item container. when applying also, the paint shall be continuously stirred in the smaller container, so that its consistency is kept uniform.

**5.2.4.2** The paint shall be lain on evenly and smoothly by means of crossing and laying off the crossing and consist of covering the area over with paint, brushing the surface hard for the first time over and then brushing alternately in opposite direction two or three times and then finally brushing lightly in direction at right angles to the same. In this process, no brush marks shall be left after the laying off is finished. No hair marks from the brush or clogging of paint puddles in the corners of panels, angles of mouldings, etc. Shall be left on the work. The full process of crossing and laying off will constitute one coat.

**5.2.4.3** the paint shall be applied with brush or rollers, for undecorated surfaces, the surface shall be treated with minimum two coats of cement water proofing paint. the second or subsequent coat shall not be started until the proceeding coat as become sufficiently hard to resist marking by brushing being used.

**5.2.4.4.** The surface on finishing shall present a flat velvety smooth finish. it shall be even and uniform in shade without patches, brush marks, paint drops etc.

### **5.2.5 Precautions:**

(a) old brushes if they are to be used with emulsion paints, shall be completely dried of turpentine or oil paint by washing in warm soap water. brushes shall be quickly washed in water immediately after use and kept immersed in water fusing break periods to prevent thee paint from hardening on the brush.



(b) in the preparation of wall for plastic emulsion painting, no oil base petals shall be used in filling cracks, holes etc.

(c) splashes on floors etc. Shall be cleaned out without delay as they will be difficult to remove after hardening.

(d) washing or surfaces treated with emulsion paint shall not be done within 3 to 4 weeks of application.

**5.3 Mode of Measurements and Payment:**

**5.3.1** The mode of measurement and payment shall be the same as for item no. 2.3 above.

**5.3.2** The rate shall be for a unit of one sq.mt.

## Annexure – I

<b>Equivalent Plain Areas of uneven surfaces</b>			
<b>(Wide Specifications for items relating to: Painting &amp; Polishing)</b>			
Sr.	Item	Mode of measurement	Multiplying Factor
1	Panelled or framed and barced on ledged and bettened or ledged and braced joinery.	Measured flat (not girthed) including chowkat or frame edges, chcocks clients etc. shall be deemed to be included in item	1.30 (for each said)
2	Fully glazed or gauze steel door and windows	Measured flat (not girthed ) including frame edges etc	0.50 (for each side)
3	Fully glazed or gauzed joinery	Measured flat (not girthed) including chowkat or frame edges, chcocks cleats etc. shall be deemed to be included in item	0.80 (for each side)
4	Partly panelled and partly glazed or gauzed joinery	Measured flat (not girthed) including chowkat or frame edges, chcocks cleats etc. shall be deemed to be included in item	1.00 (for each side)
5	Collapsible gate	Measured flat (size of opening) no separate measurements shall be taken for the top and bottom guide rails , rollers , fittings , etc.	1.50 (for painting all over)

**Note: In case of more details please refer booklet of General Technical Specification for Building Work of government of Gujarat.**

## Annexure – II

### Proposed Rate of SOR 2015-16

Item Code	Item No. as per NBO	Description	Unit	Proposed Rate of SOR 2015-16 (Rs.)
18001	18.11	White Washing with lime on wall/Celling surface (two coats) give an even shade including scraping and thoroughly brooming the surface to remove all dirt, dust, mortar drops and other foreign matter as directed by Engineer In-charge. (S.O.R /IT. NO. 18.11/ P.201) = 7.62 Rs.	Sq. Mt.	7.62/-
18023/ 18024	18.46/18.47	Distempering (Two coats) with Acrylic washable distemper of approved brand (1st quality) with necessary scraping, laphi touching and of required shade on wall surface to give an even shade, after thoroughly brushing the surface clean of all grease dirt, loose pieces of scale as directed by engineer In-Charge. (S.O.R /IT. NO. 18.46 + 18.47/P.203) = 17.10 + 18.73 = 35.83 Rs.	Sq. Mt.	35.83/-
19003/ 19004	19.11/19.15	Painting two coats (excluding priming coat) on previously painted steel and other metal surface with enamel paint (1st quality) to give an even shade including cleaning the surface of all dirt, dust and other foreign matter as directed by engineer In-Charge. (S.O.R/ IT. NO. 19.11 + 19.15/P.205) = 34.71 + 38.85 = 73.56 Rs.	Sq. Mt.	73.56/-
19012/ 19004	19.73/19.15	Painting two coats (excluding priming coat) on previously painted wood and wood base surface with enamel paint (1 <sup>st</sup> quality) to give an even shade cleaning including of all dirt, dust and other foreign matter as directed by engineer In-Charge. (S.O.R/ IT. NO. 19.73 /P.206 + 19.15 / P.205) = 34.93 + 38.85 = 73.38 Rs.	Sq. Mt.	73.78/-
19012/ 19004	19.73/19.15	Painting two coats (excluding priming coat) on previously painted wall surface with enamel paint (1 <sup>st</sup> quality) to give an even shade cleaning of all dirt, dust and other foreign matter including with necessary scraping and laphi touching as directed by engineer In-Charge. (S.O.R/ IT. NO. 19.73 /P.206 + 19.15 / P.205) = 34.93 + 38.85 = 73.38 Rs.	Sq. Mt.	73.78/-