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| --- | --- | --- | --- | --- | --- |
| **S.No** | **Description of Item** | **Qty** | **Unit** | **Rate** | **Amount** |
| **A** | **DISMANTLING WORKS** |  |  |  |  |
| 1 | Dismantling existing 4 Nos air ventilators, including removal of MS frames, grinding, cutting & disposal | 4 | Nos |  |  |
| 2 | Dismantling ceiling-mounted iron grill framework (safe removal, tagging & storing) Gas-cutting/welding removal of ceiling iron grill framework without damaging the slab | 1 | Job |  |  |
| 3 | Dismantling 2 Nos existing Air Conditioners (split units) including removal of copper pipe routing. Safely remove indoor & outdoor units. Disconnect copper piping, drain pipe, electrical wiring. Store safely for reinstallation. Nitrogen purging to avoid moisture ingress (recommended). | 2 | Nos |  |  |
| 4 | Dismantling loose / debonded plaster from walls & soffit in basement | 50 | sqm |  |  |
| 5 | Providing temporary support & safety barricading in confined basement corridors/rooms/vaults. | 1 | Job |  |  |
| B | **RCC BLOCKING OF OLD VENTILATOR OPENINGS (WITH PIPE SLEEVES FOR AC)** |  |  |  |  |
| 6 | Trimming & dressing existing ventilator openings for structural closure. Mechanical cutting of uneven brick edges. Ensure square/rectangular geometry for RCC casting. Cleaning of surface with water/air jet. | 4 | Nos |  |  |
| 7 | Providing GI/UPVC pipe sleeves (75 mm–100 mm dia) for AC copper pipe routing inside ventilator opening before RCC casting. sleeve pipe horizontally embedded before RCC casting, to allow AC copper pipe & drain line passage. Pipe sealed with tape to prevent cement ingress. | 4 | Nos |  |  |
| 8 | Providing, cutting & fixing 20 mm TMT bars (Fe-500) for reinforcement anchorage in ventilator closure. Cutting, bending & fixing 20 mm TMT bars as dowels and mesh. Minimum 40 d anchorage into brick wall sides using chemical anchoring | 80 | kg |  |  |
| 9 | Formwork/shuttering for both sides of opening. Steel shuttering both sides of opening. Proper bracing to prevent deflection. Release agent application. | 9 | sqm |  |  |
| 10 | Casting RCC M-25 to fill existing ventilator openings. Mix: 1:1.5:3 using 20 mm crushed aggregate. Vibration using needle vibrator. Curing for minimum 7 days. | 7.5 | cum |  |  |
| 11 | Curing, hacking & finishing the blocked ventilator surface. Hacking, surface levelling with polymer-modified mortar (Fosroc/Sika). Ready for plastering/painting. | 9 | sqm |  |  |
| C | **NEW VENTILATION OPENINGS (2 NOS) & FIXING OF NEW VENTILATORS** |  |  |  |  |
| 12 | Cutting & forming of new openings (approx. 600×600 mm) in load-bearing brick wall using mechanical cutter.Mechanical cutting using Core cutting/diamond cutter (no manual hammering). Removing brick masonry/ Concrete/ RCC carefully without damaging structural integrity | 2 | Nos |  |  |
| 13 | Providing reinforcement lintel (12 mm dia steel) above each opening. 12 mm bars + 6 mm stirrups @150 mm c/c. Lintel depth = 150 mm. Fe-500 steel | 20 | kg |  |  |
| 14 | Edge finishing & plastering around new openings CM 1:4 cement plaster, 12 mm thick. Waterproof compound (Dr. Fixit / Fosroc). | 4 | sqm |  |  |
| 15 | Fabrication & fixing of heavy-gauge MS ventilator frame. 25 × 25 × 3 mm MS hollow section frame. Welded & anchored with Hilti/Fischer fasteners. One coat zinc primer + two coats enamel paint. | 2 | Nos |  |  |
| 16 | Fixing & installation of new heavy-duty ventilators. Ventillator will be provided by Bank. | 2 | Nos |  |  |
| 17 | Welding, grinding & finishing around ventilator frame | 1 | Job |  |  |
| 18 | Disposal of debris from new openings | 0.5 | MT |  |  |
| D | **CEILING RESTORATION WORK (AS PER NIT DELHI – RESTORATION MEASURES I, II, III)** |  |  |  |  |
| 19 | Chipping of loose concrete (light chipping) Light chipping to expose sound concrete. Cleaning with blower & water jet. | 25 | sqm |  |  |
| 20 | Rust removal using chemical agent & wire brushing Two coats of alkaline rust remover. | 25 | sqm |  |  |
| 21 | Zinc-rich epoxy primer on exposed rebar 75–85% zinc content | 25 | sqm |  |  |
| 22 | Bond coat acrylic polymer based. SBR/Styrene polymer. | 25 | sqm |  |  |
| 23 | Polymer Modified Mortar (PMM) for cover reconstruction Ready-mix PMM with compressive strength 35 MPa. | 1.5 | cum |  |  |
| 24 | PU/Epoxy injection grouting for cracks & seepage with nozzles @300 mm c/c. Crack sealing through PVC nozzles at 300 mm c/c. Injection pressure 3–5 bar. | 30 | Rmt |  |  |
| 25 | PU resin injection (Nitofill WS type) for leakage arrest | 20 | Rmt |  |  |
| 26 | Micro-concrete for deeper cavities. Non-shrink flowable micro-concrete | 0.5 | cum |  |  |
| E | **REINSTALLATION OF DISMANTLED IRON GRILLS FRAMEWORK** |  |  |  |  |
| 27 | Rewelding / refixing iron grill ceiling framework after completion of RCC & plaster work. Aligning stored grill frames. Welding with 3.15 mm electrodes. Grinding & finishing. | 1 | Job |  |  |
| 28 | Grinding, finishing of welded joints | 1 | Job |  |  |
| F | **AC REINSTALLATION WORK** |  |  |  |  |
| 29 | Reinstallation of 2 Nos AC units, including connection of copper pipes through pre-installed sleeves. Reconnect dismantled copper pipes, drain line & wiring. | 2 | Nos |  |  |
| 30 | Pressure testing, refilling gas (if required) Nitrogen pressure test to 150–180 psi. Recharge refrigerant (if required). | 1 | Job |  |  |
| 31 | Insulation & clamping of AC piping. Nitrile rubber insulation min 13 mm thick. | 1 | Job |  |  |
| G | **BRICK WALL & PLASTER REPAIR (AS PER NIT DELHI AUDIT – MEASURE VI)** |  |  |  |  |
| 32 | Removal of deteriorated/wet plaster | 80 | sqm |  |  |
| 33 | Waterproof bonding coat on brick wall | 80 | sqm |  |  |
| 34 | Re-plastering with CM 1:4 + waterproof compound Two coats waterproofing additive. 12–15 mm thickness. | 80 | sqm |  |  |
| 35 | Crack filling with polymer modified paste For non-structural cracks <5 mm. Polymer-based filler. | 50 | Rmt |  |  |
| H | **STEEL GIRDER REPAIR & PAINTING (NIT MEASURE 7)** |  |  |  |  |
| 36 | Wire brushing / mechanical cleaning of steel girders | 20 | sqm |  |  |
| 37 | Copper blasting / deep cleaning | 20 | sqm |  |  |
| 38 | Epoxy steel putty for pitting corrosion | 1 | Job |  |  |
| 39 | Fixing MS plate 8 mm (if section loss >20%) | 150 | kg |  |  |
| 40 | Zinc-rich primer (2 coats) | 20 | sqm |  |  |
| 41 | PU topcoat paint (2 coats) | 20 | sqm |  |  |
| I | **PAINTING WORK (FULL VAULT)** |  |  |  |  |
| 42 | Wall painting – internal wall emulsion (2 coats) with primer | 350 | sqm |  |  |
| 43 | Ceiling paint with putty touch-up (2 coats) | 120 | sqm |  |  |
| 44 | Painting of iron shutters / iron grills / iron doors with synthetic enamel. One coat red oxide primer. Two coats synthetic enamel. | 60 | sqm |  |  |
| 45 | Painting of metal conduit, fixtures & frames | 1 | Job |  |  |
| J | **ELECTRICAL COORDINATION WORKS** |  |  |  |  |
| 46 | Shifting/refixing of LED tube lights & conduits during repair | 1 | Job |  |  |
| 47 | Providing additional PVC conduit/clamps | 30 | Rmt |  |  |
| K | **FLOOR REPAIR & CLEANUP** |  |  |  |  |
| 48 | PCC 1:2:4 floor repair patches | 5 | sqm |  |  |
| 49 | Anti-fungal, anti-moss chemical treatment | 1 | Job |  |  |
| 50 | Malba disposal to authorized landfill | 2 | MT |  |  |
|  | Total Amount = |  |  |  |  |

**Above rates and amounts are excluding GST and GST as applicable shall be charged extra.**