

Item No	Description	Unit	Zone-A (Dhaka, Mymensingh)	Zone-B (Chattogram, Sylhet)	Zone-C (Khulna, Barisal, Gopalganj)	Zone-D (Rajshahi, Rangpur)
	CHAPTER-08: Construction Chemicals Use (Rebar and Bolt Anchoring , Conc. Bonding, Water / Leakage / Damp Proofing, Rust Control/ Admixtures Etc.)					
Item No	Description of Item	Unit	Unit Price (Taka)	Unit Price (Taka)	Unit Price (Taka)	Unit Price (Taka)
08.1	Execution of rebar / threaded bolt anchoring works in connection with retrofitting works only in constrained conditions and limited scope of works to utilise full capacity of manpower and machineries/ equipment, by making drilled hole in reinforced concrete members (stone / brick chips as coarse aggregates) with specified diameter and depth , cleaning the holes by soft nylon round brush and air blower or other suitable methods to remove residues / dust completely, supplying and injecting / applying epoxy / resin based mortar / grout (effective in dry, moist and sub-merged conditions) in the holes by using epoxy gun so that the mortar overflow after inserting rebar / bolt in the hole and inserting rebar / bolt in the hole as per drawing and directions and acceptance of the engineer in charge and complying the following conditions , criteria. (The Cost is excluding the costs of rebars/ bolts and materials sampling & testing)					
Do.Part	The anchoring grout shall be in paste / pouring form and shall comply the tensile and share strength criteria provided in structural design as per standard testing methods of the code ACI / BNBC / ASTM. The anchoring grout shall have the properties of resistance to corrosion (alkalis, fuels, acids, oils etc.), no-sagging, non-shrinkage, water penetration, initial setting (gelling) time less than 5 minutes, curing time less than 90 minutes at 5 to 35 degree celcius. The contractor shall supply the catalogue, certification of properties & testing criteria by the international standard organisation (such as ASTM, BS, EN), certificate of origin of the anchoring grout from the approved manufacturer / agent / dealer in Bangladesh and copy of challan of purchasing.					
08.1.1	Rebar/ Bolt anchoring In reinforced concrete. With brick chips as coarse aggregates (Dry Condition)					

Item No	Description	Unit	Zone-A (Dhaka, Mymensingh)	Zone-B (Chattogram, Sylhet)	Zone-C (Khulna, Barisal, Gopalganj)	Zone-D (Rajshahi, Rangpur)
08.1.1.1	Holes : Horizontal, downward and at 90 degree to slanting surface					
08.1.1.1.1	Rebar 8d, Hole 12d (All in mm)	meter	Tk. 943.00	Tk. 943.00	Tk. 934.00	Tk. 934.00
08.1.1.1.2	Rebar 10d, Hole 14d (All in mm)	meter	Tk. 1,050.00	Tk. 1,050.00	Tk. 1,040.00	Tk. 1,040.00
08.1.1.1.3	Rebar 12d, Hole 16d (All in mm)	meter	Tk. 1,124.00	Tk. 1,124.00	Tk. 1,116.00	Tk. 1,116.00
08.1.1.1.4	Rebar 16d, Hole 20 (All in mm)	meter	Tk. 1,835.00	Tk. 1,835.00	Tk. 1,826.00	Tk. 1,826.00
08.1.1.1.5	Rebar 20d, Hole 24d (All in mm)	meter	Tk. 2,164.00	Tk. 2,164.00	Tk. 2,155.00	Tk. 2,155.00
08.1.1.1.5	Rebar 25d, Hole 30d (All in mm)	meter	Tk. 3,791.00	Tk. 3,791.00	Tk. 3,781.00	Tk. 3,781.00
08.1.1.2	Upward Holes (90 degree to horizontal surface)					
08.1.1.2.1	Rebar 8d, Hole 12d (All in mm)	meter	Tk. 1,680.00	Tk. 1,680.00	Tk. 1,657.00	Tk. 1,657.00
08.1.1.2.2	Rebar 10d, Hole 14d (All in mm)	meter	Tk. 1,704.00	Tk. 1,704.00	Tk. 1,683.00	Tk. 1,683.00
08.1.1.2.3	Rebar 12d, Hole 16d (All in mm)	meter	Tk. 1,783.00	Tk. 1,783.00	Tk. 1,762.00	Tk. 1,762.00
08.1.1.2.4	Rebar 16d, Hole 20d (All in mm)	meter	Tk. 2,655.00	Tk. 2,655.00	Tk. 2,632.00	Tk. 2,632.00
08.1.1.2.5	Rebar 20d, Hole 24d (All in mm)	meter	Tk. 3,163.00	Tk. 3,163.00	Tk. 3,138.00	Tk. 3,138.00
08.1.1.2.6	Rebar 25d, Hole 30d (All in mm)	meter	Tk. 5,324.00	Tk. 5,324.00	Tk. 5,293.00	Tk. 5,293.00
08.1.2	Rebar/ Bolt anchoring in reinforced concrete. With brick chips as Coarse aggregates (Wet (SSD) & Submerged Condition)					
08.1.2.1	Holes : Horizontal, downward and at 90 degree to slanting surface					
08.1.2.1.1	Rebar 8d, Hole 12d (All in mm)	meter	Tk. 1,240.00	Tk. 1,240.00	Tk. 1,231.00	Tk. 1,231.00
08.1.2.1.2	Rebar 10d, Hole 14d (All in mm)	meter	Tk. 1,406.00	Tk. 1,406.00	Tk. 1,396.00	Tk. 1,396.00
08.1.2.1.3	Rebar 12d, Hole 16d (All in mm)	meter	Tk. 1,539.00	Tk. 1,539.00	Tk. 1,531.00	Tk. 1,531.00
08.1.2.1.4	Rebar 16d, Hole 20d (All in mm)	meter	Tk. 2,681.00	Tk. 2,681.00	Tk. 2,672.00	Tk. 2,672.00
08.1.2.1.5	Rebar 20d, Hole 24d (All in mm)	meter	Tk. 3,188.00	Tk. 3,188.00	Tk. 3,179.00	Tk. 3,179.00
08.1.2.1.5	Rebar 25d, Hole 30d (All in mm)	meter	Tk. 5,760.00	Tk. 5,760.00	Tk. 5,750.00	Tk. 5,750.00

Handwritten signatures and initials in blue ink are present below the table, including names like 'AA', 'AB', 'AC', 'AD', 'AE', 'AF', 'AG', 'AH', 'AI', 'AJ', 'AK', 'AL', 'AM', 'AN', 'AO', 'AP', 'AQ', 'AR', 'AS', 'AT', 'AU', 'AV', 'AW', 'AX', 'AY', 'AZ', 'BA', 'BB', 'BC', 'BD', 'BE', 'BF', 'BG', 'BH', 'BI', 'BJ', 'BK', 'BL', 'BM', 'BN', 'BO', 'BP', 'BQ', 'BR', 'BS', 'BT', 'BU', 'BV', 'BW', 'BX', 'BY', 'BZ', 'CA', 'CB', 'CC', 'CD', 'CE', 'CF', 'CG', 'CH', 'CI', 'CJ', 'CK', 'CL', 'CM', 'CN', 'CO', 'CP', 'CQ', 'CR', 'CS', 'CT', 'CU', 'CV', 'CW', 'CX', 'CY', 'CZ', 'DA', 'DB', 'DC', 'DD', 'DE', 'DF', 'DG', 'DH', 'DI', 'DJ', 'DK', 'DL', 'DM', 'DN', 'DO', 'DP', 'DQ', 'DR', 'DS', 'DT', 'DU', 'DV', 'DW', 'DX', 'DY', 'DZ', 'EA', 'EB', 'EC', 'ED', 'EE', 'EF', 'EG', 'EH', 'EI', 'EJ', 'EK', 'EL', 'EM', 'EN', 'EO', 'EP', 'EQ', 'ER', 'ES', 'ET', 'EU', 'EV', 'EW', 'EX', 'EY', 'EZ', 'FA', 'FB', 'FC', 'FD', 'FE', 'FF', 'FG', 'FH', 'FI', 'FJ', 'FK', 'FL', 'FM', 'FN', 'FO', 'FP', 'FQ', 'FR', 'FS', 'FT', 'FU', 'FV', 'FW', 'FX', 'FY', 'FZ', 'GA', 'GB', 'GC', 'GD', 'GE', 'GF', 'GG', 'GH', 'GI', 'GJ', 'GK', 'GL', 'GM', 'GN', 'GO', 'GP', 'GQ', 'GR', 'GS', 'GT', 'GU', 'GV', 'GW', 'GX', 'GY', 'GZ', 'HA', 'HB', 'HC', 'HD', 'HE', 'HF', 'HG', 'HH', 'HI', 'HJ', 'HK', 'HL', 'HM', 'HN', 'HO', 'HP', 'HQ', 'HR', 'HS', 'HT', 'HU', 'HV', 'HW', 'HX', 'HY', 'HZ', 'IA', 'IB', 'IC', 'ID', 'IE', 'IF', 'IG', 'IH', 'II', 'IJ', 'IK', 'IL', 'IM', 'IN', 'IO', 'IP', 'IQ', 'IR', 'IS', 'IT', 'IU', 'IV', 'IW', 'IX', 'IY', 'IZ', 'JA', 'JB', 'JC', 'JD', 'JE', 'JF', 'JG', 'JH', 'JI', 'JJ', 'JK', 'JL', 'JM', 'JN', 'JO', 'JP', 'JQ', 'JR', 'JS', 'JT', 'JU', 'JV', 'JW', 'JX', 'JY', 'JZ', 'KA', 'KB', 'KC', 'KD', 'KE', 'KF', 'KG', 'KH', 'KI', 'KJ', 'KK', 'KL', 'KM', 'KN', 'KO', 'KP', 'KQ', 'KR', 'KS', 'KT', 'KU', 'KV', 'KW', 'KX', 'KY', 'KZ', 'LA', 'LB', 'LC', 'LD', 'LE', 'LF', 'LG', 'LH', 'LI', 'LJ', 'LK', 'LL', 'LM', 'LN', 'LO', 'LP', 'LQ', 'LR', 'LS', 'LT', 'LU', 'LV', 'LW', 'LX', 'LY', 'LZ', 'MA', 'MB', 'MC', 'MD', 'ME', 'MF', 'MG', 'MH', 'MI', 'MJ', 'MK', 'ML', 'MM', 'MN', 'MO', 'MP', 'MQ', 'MR', 'MS', 'MT', 'MU', 'MV', 'MW', 'MX', 'MY', 'MZ', 'NA', 'NB', 'NC', 'ND', 'NE', 'NF', 'NG', 'NH', 'NI', 'NJ', 'NK', 'NL', 'NM', 'NN', 'NO', 'NP', 'NQ', 'NR', 'NS', 'NT', 'NU', 'NV', 'NW', 'NX', 'NY', 'NZ', 'OA', 'OB', 'OC', 'OD', 'OE', 'OF', 'OG', 'OH', 'OI', 'OJ', 'OK', 'OL', 'OM', 'ON', 'OO', 'OP', 'OQ', 'OR', 'OS', 'OT', 'OU', 'OV', 'OW', 'OX', 'OY', 'OZ', 'PA', 'PB', 'PC', 'PD', 'PE', 'PF', 'PG', 'PH', 'PI', 'PJ', 'PK', 'PL', 'PM', 'PN', 'PO', 'PP', 'PQ', 'PR', 'PS', 'PT', 'PU', 'PV', 'PW', 'PX', 'PY', 'PZ', 'QA', 'QB', 'QC', 'QD', 'QE', 'QF', 'QG', 'QH', 'QI', 'QJ', 'QK', 'QL', 'QM', 'QN', 'QO', 'QP', 'QQ', 'QR', 'QS', 'QT', 'QU', 'QV', 'QW', 'QX', 'QY', 'QZ', 'RA', 'RB', 'RC', 'RD', 'RE', 'RF', 'RG', 'RH', 'RI', 'RJ', 'RK', 'RL', 'RM', 'RN', 'RO', 'RP', 'RQ', 'RR', 'RS', 'RT', 'RU', 'RV', 'RW', 'RX', 'RY', 'RZ', 'SA', 'SB', 'SC', 'SD', 'SE', 'SF', 'SG', 'SH', 'SI', 'SJ', 'SK', 'SL', 'SM', 'SN', 'SO', 'SP', 'SQ', 'SR', 'SS', 'ST', 'SU', 'SV', 'SW', 'SX', 'SY', 'SZ', 'TA', 'TB', 'TC', 'TD', 'TE', 'TF', 'TG', 'TH', 'TI', 'TJ', 'TK', 'TL', 'TM', 'TN', 'TO', 'TP', 'TQ', 'TR', 'TS', 'TT', 'TU', 'TV', 'TW', 'TX', 'TY', 'TZ', 'UA', 'UB', 'UC', 'UD', 'UE', 'UF', 'UG', 'UH', 'UI', 'UJ', 'UK', 'UL', 'UM', 'UN', 'UO', 'UP', 'UQ', 'UR', 'US', 'UT', 'UU', 'UV', 'UW', 'UX', 'UY', 'UZ', 'VA', 'VB', 'VC', 'VD', 'VE', 'VF', 'VG', 'VH', 'VI', 'VJ', 'VK', 'VL', 'VM', 'VN', 'VO', 'VP', 'VQ', 'VR', 'VS', 'VT', 'VU', 'VV', 'VW', 'VX', 'VY', 'VZ', 'WA', 'WB', 'WC', 'WD', 'WE', 'WF', 'WG', 'WH', 'WI', 'WJ', 'WK', 'WL', 'WM', 'WN', 'WO', 'WP', 'WQ', 'WR', 'WS', 'WT', 'WU', 'WV', 'WW', 'WX', 'WY', 'WZ', 'XA', 'XB', 'XC', 'XD', 'XE', 'XF', 'XG', 'XH', 'XI', 'XJ', 'XK', 'XL', 'XM', 'XN', 'XO', 'XP', 'XQ', 'XR', 'XS', 'XT', 'XU', 'XV', 'XW', 'XX', 'XY', 'XZ', 'YA', 'YB', 'YC', 'YD', 'YE', 'YF', 'YG', 'YH', 'YI', 'YJ', 'YK', 'YL', 'YM', 'YN', 'YO', 'YP', 'YQ', 'YR', 'YS', 'YT', 'YU', 'YV', 'YW', 'YX', 'YZ', 'ZA', 'ZB', 'ZC', 'ZD', 'ZE', 'ZF', 'ZG', 'ZH', 'ZI', 'ZJ', 'ZK', 'ZL', 'ZM', 'ZN', 'ZO', 'ZP', 'ZQ', 'ZR', 'ZS', 'ZT', 'ZU', 'ZV', 'ZW', 'ZX', 'ZY', 'ZZ'.

Item No	Description	Unit	Zone-A (Dhaka, Mymensingh)	Zone-B (Chattogram, Sylhet)	Zone-C (Khulna, Barisal, Gopalganj)	Zone-D (Rajshahi, Rangpur)
08.1.3	Rebar / bolt anchoring In reinforced concrete. With Stone chips as Coarse Aggregates (Dry Conditions)					
08.1.3.1	Holes : Horizontal, downward and at 90 degree to slanting surface					
08.1.3.1.1	Rebar 8d, Hole 12d (All in mm)	meter	Tk. 1,041.00	Tk. 1,041.00	Tk. 1,030.00	Tk. 1,030.00
08.1.3.1.2	Rebar 10d, Hole 14d (All in mm)	meter	Tk. 1,094.00	Tk. 1,094.00	Tk. 1,084.00	Tk. 1,084.00
08.1.3.1.3	Rebar 12d, Hole 15d (All in mm)	meter	Tk. 1,173.00	Tk. 1,173.00	Tk. 1,163.00	Tk. 1,163.00
08.1.3.1.4	Rebar 16d, Hole 20d (All in mm)	meter	Tk. 1,902.00	Tk. 1,902.00	Tk. 1,890.00	Tk. 1,890.00
08.1.3.1.5	Rebar 20d, Hole 24d (All in mm)	meter	Tk. 2,276.00	Tk. 2,276.00	Tk. 2,264.00	Tk. 2,264.00
08.1.3.1.6	Rebar 25d, Hole 30d (All in mm)	meter	Tk. 3,998.00	Tk. 3,998.00	Tk. 3,983.00	Tk. 3,983.00
08.1.3.2	Upward Holes (90 degree to horizontal surface)					
08.1.3.2.1	Rebar 8d, Hole 12d (All in mm)	meter	Tk. 1,850.00	Tk. 1,850.00	Tk. 1,824.00	Tk. 1,824.00
08.1.3.2.2	Rebar 10d, Hole 14d (All in mm)	meter	Tk. 1,891.00	Tk. 1,891.00	Tk. 1,866.00	Tk. 1,866.00
08.1.3.2.3	Rebar 12d, Hole 16d (All in mm)	meter	Tk. 2,003.00	Tk. 2,003.00	Tk. 1,978.00	Tk. 1,978.00
08.1.3.2.4	Rebar 16d, Hole 20d (All in mm)	meter	Tk. 3,077.00	Tk. 3,077.00	Tk. 3,046.00	Tk. 3,046.00
08.1.3.2.5	Rebar 20d, Hole 24d (All in mm)	meter	Tk. 3,533.00	Tk. 3,533.00	Tk. 3,502.00	Tk. 3,502.00
08.1.3.2.6	Rebar 25d, Hole 30d (All in mm)	meter	Tk. 5,846.00	Tk. 5,846.00	Tk. 5,807.00	Tk. 5,807.00
08.1.4	Rebar/ Bolt anchoring in reinforced concrete. With Stone chips as Coarse aggregates (Wet (SSD) & submerged conditions)					
08.1.4.1	Holes : Horizontal, downward and at 90 degree to slanting surface					
08.1.4.1.1	Rebar 8d, Hole 12d (All in mm)	meter	Tk. 1,325.00	Tk. 1,325.00	Tk. 1,313.00	Tk. 1,313.00
08.1.4.1.2	Rebar 10d, Hole 14d (All in mm)	meter	Tk. 1,434.00	Tk. 1,434.00	Tk. 1,423.00	Tk. 1,423.00
08.1.4.1.3	Rebar 12d, Hole 16d (All in mm)	meter	Tk. 1,569.00	Tk. 1,569.00	Tk. 1,559.00	Tk. 1,559.00
08.1.4.1.4	Rebar 16d, Hole 20d (All in mm)	meter	Tk. 2,709.00	Tk. 2,709.00	Tk. 2,697.00	Tk. 2,697.00
08.1.4.1.5	Rebar 20d, Hole 24d (All in mm)	meter	Tk. 3,253.00	Tk. 3,253.00	Tk. 3,241.00	Tk. 3,241.00

Item No	Description	Unit	Zone-A (Dhaka, Mymensingh)	Zone-B (Chattogram, Sylhet)	Zone-C (Khulna, Barisal, Gopalganj)	Zone-D (Rajshahi, Rangpur)
08.1.4.1.6	Rebar 25d, Hole 30d (All in mm)	meter	Tk. 5,878.00	Tk. 5,878.00	Tk. 5,863.00	Tk. 5,863.00
08.2	New to Old Concrete Bonding :					
08.2.1	New to old concrete bonding works by epoxy based bonding agent: execution of old to new concrete bonding works in connection with retrofitting works only in constrained conditions and limited scope of works to utilise full capacity of manpower and machineries/ equipment, by supplying, preparing and applying epoxy bonding agent coat as per manufacturer's guidelines in dry and damped conditions onto surfaces (horizontal / slanting / vertical) of any type of reinforced concrete members subject to satisfying the following properties/ criteria / conditions / conformities and as per direction and acceptance of the engineer-in-charge. (The Cost is excluding the costs for materials sampling & testing)					
Do.Part	The old concrete surfaces must be properly prepared (remove all loose concrete , particles, dust, grease , oil or curing compound from concrete and steel surfaces using wire brush , light sweep blasting, water jetting etc.) and concrete surfaces must be free from excess standing water. The bonding agent shall have the properties pot life 2 to 3 hours, non-toxic, pullout strength greater than 2.5 N/sq.mm at concrete failure (test method ASTM D4541), bond strength greater than 10 N/sq.mm (test method ASTM C882). The contractor shall supply the catalogue, certification of properties & testing criteria by the international standard organisation (such as ASTM, BS, EN), certificate of origin of the bonding agent from the approved manufacturer / agent / dealer in Bangladesh and copy of challan of purchasing.					
08.2.1.1	On top & sides of footings (single , combined , mat , pile Cap) and on top & sides all floor slabs.	sqm	Tk. 1,031.00	Tk. 1,031.00	Tk. 1,028.00	Tk. 1,028.00
08.2.1.2	On joining surfaces of vertical reinforced concrete members below and above ground level (Column, Pedestal, Walls)	sqm	Tk. 1,315.00	Tk. 1,313.00	Tk. 1,295.00	Tk. 1,295.00

Item No	Description	Unit	Zone-A (Dhaka, Mymensingh)	Zone-B (Chattogram, Sylhet)	Zone-C (Khulna, Barisal, Gopalganj)	Zone-D (Rajshahi, Rangpur)
08.2.2	New to old concrete bonding works by SBR based bonding agent: execution of old to new concrete bonding works in connection with retrofitting works only in constrained conditions and limited scope of works to utilise full capacity of manpower and machineries/ equipment, by supplying, preparing and applying SBR based bonding agent coat as per manufacturer's guidelines in dry and damped conditions onto surfaces (horizontal / slanting / vertical) of any type of reinforced concrete members subject to satisfying the following properties/ criteria / conditions / conformities and as per direction and acceptance of the engineer-in-charge. (The Cost is excluding the costs for materials sampling & testing)					
Do.Part	To be applied by mixing bonding agent and ordinary portland cement in proportion (bonding chemical 1 liter : cement 1.5 kg) or as per application instructions by the bonding chemical manufacturers after the old concrete surfaces properly prepared (remove all loose concrete , particles, dust, grease , oil or curing compound from concrete and steel surfaces using wire brush , scrubber etc.) , roughen the concrete surface but must be free from loose particles and dust and saturate the surface with water and remove excess / standing water. The bonding agent shall have the properties of non-toxicity, adhesion for bond coat (ASTM D4541) greater than 1.50 MPa or concrete failure. The contractor shall supply the catalogue, certificate of origin of the bonding agent and certification of properties & testing criteria by the international standard organisation (such as ASTM, BS, EN) from the approved manufacturer / agent / dealer in Bangladesh and copy of challan of purchasing.					
08.2.2.1	On top & sides of footings (single , combined , mat , pile Cap) and on top & sides all floor slabs.	sqm	Tk. 250.00	Tk. 250.00	Tk. 247.00	Tk. 247.00
08.2.2.2	On joining surfaces of vertical reinforced concrete members below and above ground level (Column, Pedestal, Walls)	sqm	Tk. 534.00	Tk. 532.00	Tk. 514.00	Tk. 514.00

Item No	Description	Unit	Zone-A (Dhaka, Mymensingh)	Zone-B (Chattogram, Sylhet)	Zone-C (Khulna, Barisal, Gopalganj)	Zone-D (Rajshahi, Rangpur)
08.2.3	New to old concrete bonding coat by acrylic polymer based bonding agent in dry and damped conditions : supplying, preparing and applying bonding coat in connection with retrofitting works only in constrained conditions and limited scope of works to utilise full capacity of man- power and machineries/ equipment, by acrylic polymer based bonding agent onto surfaces (horizontal / slanting / vertical) of any type of reinforced concrete members by bonding chemical (1 liter bonding agent for 5.00 sqm surf-ace in one coat) or as per application instructions by the bonding agent manufacturers subject to satisfying the following properties/ criteria / conditions / conformities and as per direction and acceptance of the engineer-in-charge. (The Cost is excluding the costs for materials sampling & testing)					
Do.Part	To be applied after the old concrete surfaces properly prepared (remove all loose concrete , particles, dust, grease , oil or curing compound from concrete and steel surfaces using wire brush , scrubber etc.) , roughen the concrete surface but must be free from loose particles and dust and saturate the surface with water and remove excess / standing water. The bonding agent shall have the properties of non-toxicity, materials standard (ASTM C1059 type-II, ASTM C932) , tensile bond strength (ASTM C932) greater than 1.0 N/sq.mm, pullout strength (ASTM D4541) greater than 1.0 N/sq.mm, slant shear bond strength (ASTM C1042) greater than 8.6 N/sq.mm. The contractor shall supply the catalogue, certificate of origin of the bonding agent and certification of properties & testing criteria by the international standard organisation (such as ASTM, BS, EN) from the approved manufacturer / agent / dealer in Bangladesh and copy of challan of purchasing.					
08.2.3.1	On top & sides of footings (single , combined , mat , pile Cap) and on top & sides all floor slabs.	sqm	Tk. 216.00	Tk. 216.00	Tk. 213.00	Tk. 213.00

Handwritten signatures and initials in blue ink are present below the table, including a large signature on the left and several smaller initials and marks across the bottom.

Item No	Description	Unit	Zone-A (Dhaka, Mymensingh)	Zone-B (Chattogram, Sylhet)	Zone-C (Khulna, Barisal, Gopalgonj)	Zone-D (Rajshahi, Rangpur)
08.2.3.2	On joining surfaces of vertical reinforced concrete members below and above ground level (Column, Pedestal, Walls)	sqm	Tk. 500.00	Tk. 498.00	Tk. 480.00	Tk. 480.00
08.3.1	Rust removal from re-bar / steel surface by chemical compound: supplying and applying rust removing compound to surfaces of re-bar / steel surfaces in connection with retro- fitting works only in constrained conditions and limited scope of works to utilise full capacity of manpower and machineries/ equipment, as per application guidelines provided by the manufacturer, subject to satisfying the following methods of application/ properties/ criteria / conditions / conformities and as per direction and acceptance of the engineer-in-charge.	sqm	Tk. 147.00	Tk. 146.00	Tk. 144.00	Tk. 144.00
Do.Part	The rust removing compound to be applied in 1 coat or as per direction by the manufacturers after properly cleaning the heavily rusted steel surfaces by wire brush / hammering / grinding etc. to remove loose rust and scale. The rust removing compound shall have the properties to apply in liquid form by using brush, sponge, spray, roller etc. The rust removing compound shall have the properties of non-corrosiveness, specific gravity 1.30 +- 0.05 (ASTM D1475), Ph 2.5 +-0.05 (ASTM C494). The contractor shall supply the catalogue, certification of properties & testing criteria by the international standard organisation (such as ASTM, BS, EN), certificate of origin of the rust removing compound from the approved manufacturer / agent / dealer in Bangladesh and copy of challan of purchasing.					

Item No	Description	Unit	Zone-A (Dhaka, Mymensingh)	Zone-B (Chattogram, Sylhet)	Zone-C (Khulna, Barisal, Gopalganj)	Zone-D (Rajshahi, Rangpur)
08.3.2	Corrosion protective coats to reinforcing bars / iron elements : supplying of water based primer made of vinyl acrylic copolymer with rust converting agent / epoxy paint with rust-converting properties and apply to reinforcing bars in 2(two) coats or as per instruction manual of the chemicals manufacturer or the agent in connection with retrofitting works only in constrained conditions and limited scope of works to utilise full capacity of manpower and machineries/ equipment, subject to satisfying the following conditions, criteria, properties, conformities and as per direction and acceptance of the Engineer-in-charge.	sqm	Tk. 120.00	Tk. 120.00	Tk. 117.00	Tk. 117.00
Do.Part	The surfaces of re-bar / steel must be cleaned properly (free from all traces of corrosion, rust, oil, grease, dust and moisture). The rust converter shall have the properties- sprayable, non-toxic, over coat time 2 to 3 hours, forms an iron complex that neutralises the rust layer and stops rust formation. The contractor shall supply the catalogue, certification of properties & testing criteria by the international standard organisation (such as ASTM, BS, EN), certificate of origin of the corrosion (rust) protecting compound from the approved manufacturer / agent / dealer in Bangladesh and copy of challan of purchasing.					

Item No	Description	Unit	Zone-A (Dhaka, Mymensingh)	Zone-B (Chattogram, Sylhet)	Zone-C (Khulna, Barisal, Gopalgonj)	Zone-D (Rajshahi, Rangpur)
08.4	Supply of polymer based curing compound as per ASTM C309 or BS7542-1992 standard and apply by stirring & spraying with motorized sprayers over the surface of fresh concrete free from surface water and avoiding bleeding of concrete maintaining the spray nozzle approximately 450 mm away from the concrete surface with passed back and forth to ensure complete coverage confirming the pump pressure for fine spray and keeping the concrete surface undisturbed until it has sufficient strength to bear surface loads [the suitability of motorized sprayer should be ensured by an application trial] ensuring adequate ventilation to avoid inhalation of vapors and contact with skin and eyes all complete as per direction and acceptance of engineer-in-charge. Mentionable here that works to be executed in connection with retrofitting works only in constrained conditions and limited scope of works to utilise full capacity of manpower and machineries/ equipment.	sqm	Tk. 272.00	Tk. 270.00	Tk. 267.00	Tk. 267.00
Do.Part	The contractor shall supply the catalogue, certification of properties & testing criteria by the international standard organisation (such as ASTM, BS, EN), certificate of origin of the product from the approved manufacturer / agent / dealer in Bangladesh and copy of challan of purchasing.					
08.5	Water proofing coating (layer) : supplying and applying water proofing coating on the concrete / brick walls surfaces with a slurry made of a liquid polymer and cementitious compound in 2(two) coats forming a minimum dry layer thickness of 1(one) mm as per application guidelines of the manufacturer, satisfying the following method, criteria, pro- perties, conformities and as per direction and acceptance of the engineer -in- charge. Mentionable here that works to be executed in connection with retrofitting works only in constrained conditions and limited scope of works to utilise full capacity of manpower and machineries/ equipment.	sqm	Tk. 705.00	Tk. 704.00	Tk. 701.00	Tk. 701.00

Item No	Description	Unit	Zone-A (Dhaka, Mymensingh)	Zone-B (Chattogram, Sylhet)	Zone-C (Khulna, Barisal, Gopalganj)	Zone-D (Rajshahi, Rangpur)
Do.Part	The surfaces must be well prepared (free from loose particles, dust, oil, grease, any old coating etc., holes filled up and levelled). The compounds to be mixed by a slow speed (300 RPM) heavy duty electro-metical stirrer the water proofing slurry shall have the properties of non-toxicity, flexible after drying, applicable on surfaces positive and negative sides of water intrusion, brushable, can be applied on horizontal, inclined and vertical surfaces, application temperature greater than 5 deg celcius, working time not less than 30 minutes . The applied water proofing layer (film) to be protected against rapid drying due to direct sun exposure, high temperature or wind and curing to be done with wet hessian cloth. Water proofing layer to be protected by plaster / patent stone / conc/ finishing items (cost of which are not included here). The contractor shall supply the catalogue, certification of properties & testing criteria by the international standard organisation (such as ASTM, BS, EN), origin of the water proofing compounds from the approved manufacturer / agent / dealer in Bangladesh and copy of challan of purchasing.					