CHAPTER 08: M.S. FABRICATION AND JOINTS IN RC WORKS

Item No.	Description of Item	Unit	Unit Rate (Dhaka, Mymensingh)	Unit Rate (Chattogram, Sylhet)	Unit Rate (Khulna, Barisal, Gopalgonj)	Unit Rate (Rajshahi, Rangpur)
08.1	Supplying, fabrication and fixing to detail as per design : ribbed or deformed bar reinforcement (excluding laboratory test fees) for Reinforced concrete, produced and marked in accordance with BDS ISO 6935-2:2016 (or standard subsequently released from BSTI) including straightening and cleaning rust, if any, bending and binding in position with supply of G.I. wires,conducting necessary laboratory tests etc. (excluding splices or laps) complete in all respect and accepted by the Engineer-in-charge (Measurement shall be recorded only on standard mass per unit length of bars, while dia of bars exceeds its standard)					
08.1.1	**Grade 300 (B300DWR: complying BDS ISO 6935-2:2016 / ASTM A615)** ribbed or deformed bar produced and marked according to Bangladesh standard, with minimum yield strength, fy (ReH)= 300 MPa but fy not exceeding 350 MPa and whatever is the actual yield strength within allowable limit as per BNBC/ ACI 318, the ratio of ultimate tensile strength fu to yield strength fy, shall be at least 1.25 and minimum elongation after fracture and minimum total elongation at maximum force is 17% and 8% respectively : up to ground floor	kg	Tk. 91.00	Tk. 91.00	Tk. 90.00	Tk. 90.00
08.1.2	**Grade 400 (B400DWR / B420DWR: complying BDS ISO 6935-2:2016 / ASTM A615)** ribbed or deformed bar produced and marked according to Bangladesh standard, with minimum yield strength, fy (ReH)= 400 MPa but fy not exceeding 480 MPa and whatever is the actual yield strength within allowable limit as per BNBC/ ACI 318, the ratio of ultimate tensile strength fu to yield strength fy, shall be at least 1.25 and minimum elongation after fracture and minimum total elongation at maximum force is 17% and 8% respectively : up to ground floor.	kg	Tk. 100.00	Tk. 100.00	Tk. 99.00	Tk. 99.00
08.1.3	**Grade 500 (B500DWR: complying BDS ISO 6935-2:2016 / ASTM A615) ribbed or deformed bar produced and marked according to Bangladesh standard, with minimum yield strength, fy (ReH)= 500 MPa and whatever is the yield strength within allowable limit as per BNBC/ ACI 318, the ratio of ultimate tensile strength fu to actual yield strength fy, shall be at least 1.25 and minimum elongation after fracture and minimum total elongation at maximum force is 17% and 8% respectively : up to ground floor.(To be used for pile work, earth retaining wall, boundary wall, water reservoir & other structures as per instruction of concerned design CHAPTER)**	kg	Tk. 95.00	Tk. 95.00	Tk. 94.00	Tk. 94.00
08.2	**Added rate** for M.S. Fabrication work in additional floor above ground floor	kg	Tk. 0.67	Tk. 0.66	Tk. 0.61	Tk. 0.61

Item No.	Description of Item	Unit	Unit Rate (Dhaka, Mymensingh)	Unit Rate (Chattogram, Sylhet)	Unit Rate (Khulna, Barisal, Gopalgonj)	Unit Rate (Rajshahi, Rangpur)
08.3	Supplying and fixing of **upset forging parallel thread rebar Couplers (excluding laboratory test fees)** conforming to ACI-318 on "Building Code Requirements for Structural Concrete" and ISO: 15835 on "Steels for the reinforcement of concrete — Reinforcement couplers for mechanical splices of bars" to ribbed or deformed bars of Grade 400 (B400DWR / B420DWR : complying BDS ISO 6935-2:2016), in splicing main rebars of structural members satisfying the condition that splice shall develop at least 1.25 times greater of yield strength (fy) than that of the connecting rebars in tension and compression including threading, enlargement at connection by forging, protecting the prepared reinforcement bars and related operations as required to complete the works per direction of Engineer-in-Charge. Minimum 0.5% of the total coupled rebars are to be tested for quality assurance.					
08.3.1	Thread Coupler for **20** mm diameter Bar	each	Tk. 319.00	Tk. 319.00	Tk. 316.00	Tk. 316.00
08.3.2	Thread Coupler for **25** mm diameter Bar	each	Tk. 507.00	Tk. 506.00	Tk. 502.00	Tk. 502.00
08.3.3	Thread Coupler for **32** mm diameter Bar	each	Tk. 728.00	Tk. 727.00	Tk. 720.00	Tk. 720.00
08.4	Supplying and fixing of **cold extrusion mechanical rebar Couplers (excluding laboratory test fees)** conforming to ACI-318 on "Building Code Requirements for Structural Concrete" and and ISO: 15835 on "Steels for the reinforcement of concrete — Reinforcement couplers for mechanical splices of bars" to ribbed or deformed bars of Grade 400 (B400DWR / B420DWR : conforming BDS ISO 6935-2:2016), in splicing main rebars of structural members satisfying the condition that splice shall develop at least 1.25 times greater of yield strength (fy) than that of the connecting rebars in tension and compression including related operations as required to complete the works as per direction of Engineer-in-Charge. Minimum 1.0% of the total coupled rebars are to be tested for quality assurance.					
08.4.1	Press Coupler for **16 mm** diameter Bar (minimum Length: 100 mm, maximum Inner diameter: 21 mm, minimum Thickness: 4.5 mm)	each	Tk. 378.00	Tk. 377.00	Tk. 374.00	Tk. 374.00
08.4.2	Press Coupler for **20 mm** diameter Bar (minimum Length: 120 mm, maximum Inner diameter: 25 mm, minimum Thickness: 5.5 mm)	each	Tk. 521.00	Tk. 520.00	Tk. 517.00	Tk. 517.00
08.4.3	Press Coupler for **22 mm** diameter Bar (minimum Length: 132 mm, maximum Inner diameter: 28 mm, minimum Thickness: 6 mm)	each	Tk. 664.00	Tk. 663.00	Tk. 659.00	Tk. 659.00
08.4.4	Press Coupler for **25 mm** diameter Bar (minimum Length: 150 mm, maximum Inner diameter: 31 mm, minimum Thickness: 7 mm)	each	Tk. 855.00	Tk. 853.00	Tk. 849.00	Tk. 849.00
08.4.5	Press Coupler for **32 mm** diameter Bar (minimum Length: 192 mm, maximum Inner diameter: 38 mm, minimum Thickness: 9 mm)	each	Tk. 1,443.00	Tk. 1,441.00	Tk. 1,436.00	Tk. 1,436.00
08.5	installation of water stopper at movable and immovable RCC green joints as per following specification.					

Item No.	Description of Item	Unit	Unit Rate (Dhaka, Mymensingh)	Unit Rate (Chattogram, Sylhet)	Unit Rate (Khulna, Barisal, Gopalgonj)	Unit Rate (Rajshahi, Rangpur)
08.5.1	Supplying, fitting and fixing **ribbed PVC water stopper with non centre bulb** of width approx. 250 mm and approx 9 mm thick for immovable (non working) RCC joints, having minimum tensile strength of 8.27MPa (approx. 1200 psi) min ultimate elongation 350%, approximate hardness 50, minimum tear resistance 0.0175 kN/mm (100 lbs/inch) at RCC construction green joints in basements, approved and in consultation with design office, providing 38 mm x 62 mm wooden batten at the top and bottom of water stopper, holding in position and keeping the water stopper in true horizontal or vertical by appropriate means as where necessary etc; all complete and accepted by the Engineer-in-charge.	meter	Tk. 1,022.00	Tk. 1,018.00	Tk. 994.00	Tk. 994.00
08.5.2	Supplying, fitting and fixing **ribbed PVC water stopper with centre bulb** of width approx. 250 mm and approx 9 mm thick for immovable (non working) RCC joints, having minimum tensile of strength 8.27 MPa (approx. 1200 psi) minimum ultimate elongation 350%, approximate hardness 50, minimum tear resistance 0.0175 kN/mm (100 lbs/inch) at RCC construction green joints in basements, approved and in consultation with design office, providing 38 mm x 62 mm wooden batten at the top and bottom of water stopper, holding in position and keeping the water stopper in true horizontal or vertical by appropriate means as where necessary etc; all complete and accepted by the Engineer-in-charge.	meter	Tk. 1,106.00	Tk. 1,103.00	Tk. 1,078.00	Tk. 1,078.00
08.6	Supplying, fitting and fixing 250 mm wide 16 SWG **Steel Sheet water stopper** in RCC construction joint holding in position and keeping the water stopper in true horizontal or vertical by appropriate means as where necessary etc; all complete and accepted by the Engineer-in-charge.	meter	Tk. 375.00	Tk. 374.00	Tk. 370.00	Tk. 370.00
08.7.1	Manufacturing, supplying, fitting and fixing **Expansion Joint** for **gap upto 100mm** with 125mmx50mmx6mm and 75mmx50mmx6mm galvanized MS angle and 8mm thick galvanized MS plate etc. all complete as per drawing, design and accepted by the Engineer-in-charge.	meter	Tk. 7,765.00	Tk. 7,757.00	Tk. 7,714.00	Tk. 7,714.00
08.7.2	Manufacturing, supplying, fitting and fixing **Expansion Joint** for **gap more than 100mm up to 150mm** with 150mmx50mmx6mm and 100mmx50mmx6mm galvanized MS angle and 8mm thick galvanized MS plate etc. all complete as per drawing, design and accepted by the Engineer-in-charge.	meter	Tk. 9,155.00	Tk. 9,147.00	Tk. 9,105.00	Tk. 9,105.00
08.7.3	Manufacturing, supplying, fitting and fixing **Expansion Joint** for **gap more than 150mm up to 200mm** with 175mmx50mmx6mm and 125mmx50mmx6mm galvanized MS angle and 8mm thick galvanized MS plate etc. all complete as per drawing, design and accepted by the Engineer-in-charge.	meter	Tk. 10,546.00	Tk. 10,538.00	Tk. 10,496.00	Tk. 10,496.00
	..... END OF CHAPTER EIGHT					