

Item No.	Description of Item	Unit	Unit Rate of Railway Division In Taka			
			Dhaka	Chattogram	Paksey	Lalmonirhat
05.7	10 mm thick finished laying in 12.5 mm thickness coloured cast in situ mosaic work in floor with one part of 10 mm machine crushed well graded, dust free and properly washed marble chips and one part of mixture containing white and grey cement in proportion (1:9) and necessary quantity of approved colouring materials including preparation of mix and laying the same over min 25 mm thick artificial patent stone flooring with brick-chips (1:2:4) including making suitable panel, compacting, curing at least for 7 days, cutting with pumice stone (No. 40, No. 80, No. 120) and finishing with Minar stone including breaking of brick chips, screening, washing of mosaic chips and supply of all necessary materials and water, electricity and other charges in all respect and accepted by the Engineer-in-charge. (Cement: CEM-II/A-M)					
05.7.1	With Indian chips and glass strip in ground floor	sqm	2342.00	2328.00	2264.00	2263.00
05.7.3	With Indian chips without glass strip in ground floor	sqm	1904.00	1890.00	1826.00	1826.00
05.7.4	With Pakistani chips without glass strip in ground floor	sqm	1956.00	1944.00	1888.00	1888.00
05.8	12 mm thick finished and laying thickness 14 mm coloured cast in situ mosaic work on floor with one part of 10 mm machine crushed well graded, dust free and properly washed marble chips and one part of mixture containing white cement and grey cement in proportion (9:1) and necessary quantity of approved colouring materials including preparation of mix and laying the same over minimum 25 mm thick artificial patent stone flooring with brick-chips (1:2:4) including making suitable panel, compacting, curing at least for 7 days, cutting with pumice stone (No. 40, No. 80, No. 120) and finishing with minar stone including breaking of brick chips, screening, washing of mosaic chips and supply of all necessary materials and water, electricity and other charges in all respect and accepted by the Engineer-in-charge. (Cement: CEM-II/A-M)					
05.8.1	With Indian chips and glass strip in ground floor	sqm	2431.00	2417.00	2353.00	2353.00
05.8.2	With Pakistani chips and glass strip in ground floor	sqm	2468.00	2454.00	2390.00	2390.00
05.8.3	With Indian chips without glass strip in ground floor	sqm	2149.00	2136.00	2080.00	2080.00
05.8.4	With Pakistani chips without glass strip in ground floor	sqm	2186.00	2173.00	2117.00	2117.00

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05.9	10 mm thick finished and laying thickness 12.5 mm coloured cast in situ mosaic work in walls with one part of 10 mm machine crushed well graded, dust free and properly washed marble chips and one part of mixture containing white cement and grey cement in proportion (9:1) and necessary quantity of approved colouring materials including preparation of mix and laying the same on 12 mm thick cement sand (F.M.≥ 1.2) plaster (1:4) to walks including compacting, curing at least for 7 days, cutting with pumice stone (No. 40, No. 80, No. 120) including finishing the corners and edges and also finishing with minar stone and supply of all necessary materials etc. and water, electricity and other charges complete in all respect and accepted by the Engineer-in-charge. (Cement: CEM-II/A-M)					
05.9.1	With Indian chips In ground floor	sqm	2305.00	2272.00	2196.00	2196.00
05.9.2	With Pakistani chips In ground floor	sqm	2338.00	2305.00	2229.00	2229.00
05.10	200 mm x 200 mm x 20 mm mosaic terrazzo tiles flooring having 10 mm thick finished mosaic top with one part of 10 mm machine crushed well graded dust free and properly washed marble chips and one part of mixture containing white cement and grey cement in 9:1 proportion pressed on 12 mm thick cement sand ((F.M.≥ 1.2) and 2.5 by 50% each) mortar (1:2) base including preparing the base; finally, setting the tiles on 40 mm thick cement sand (F.M.1.2 and 2.5 by 50% each) mortar (1:3) including compacting, cutting with pumice stone (No. 40, No. 80, No. 120) and finishing the corners and edges and also finishing with minar stone including screening, washing mosaic chips and supply of all necessary materials etc. and water, electricity and other charges complete in all respect and accepted by the Engineer-in-charge. (Cement: CEM-II/A-M)					
05.10.1	200 mm x 200 mm x 20 mm (finished) mosaic terrazzo tiles flooring with Indian chips In ground floor	sqm	2029.00	2023.00	1980.00	1979.00
05.10.2	200 mm x 200 mm x 20 mm (finished) mosaic terrazzo tiles flooring with Pakistani chips In ground floor	sqm	2061.00	2055.00	2011.00	2011.00

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Item No.	Description of Item	Unit	Unit Rate of Railway Division In Taka			
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05.11	Extra cost shall be incorporated in the estimate for mosaic and terrazzo tiles work above ground floor (item no.- 5.1 to 5.10).					
05.11.1	Add for each additional floor up to 5 th floor	sqm	13.00	13.00	12.00	12.00
05.11.2	Add for each additional floor for 6th to 9th floor	sqm	27.00	26.00	24.00	24.00
05.11.3	Add for each additional floor for 10th floor and above	sqm	40.00	39.00	36.00	36.00

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Item No.	Description of Item	Unit	Unit Rate of Railway Division In Taka			
			Dhaka	Chattogram	Paksey	Lalmonirhat
CHAPTER 06: TILES, MARBLE STONE AND GRANITE STONE WORKS						
Item No.	Description of Item	Unit	Unit Rate of Railway Division In Taka			
			Dhaka	Chattogram	Paksey	Lalmonirhat
06.1	Supplying, fitting and fixing country made GP(Gress Porcellanto) - glazed or unglazed homogeneous floor tiles complying BDS ISO 13006: 2015, water absorbtion ≤ 0.5%, modulus of rupture (MOR) ≥ 27 N/mm ² , irrespective of color &/or design, with cement sand (F.M.≥ 1.2) mortar (1:4) base and raking out the joints with white cement including cutting and laying the tiles in proper way and finishing with care etc. all complete and accepted by the Engineer-in-charge. (Cement: CEM-II/A-M). In ground floor					
06.1.1	GP (homogeneous) 300 mm x 300 mm floor tiles	sqm	1344.00	1339.00	1313.00	1313.00
06.1.2	GP (homogeneous) 400 mm x 400 mm floor tiles	sqm	1483.00	1477.00	1452.00	1452.00
06.2	Supplying, fitting and fixing country made mirror polished homogeneous floor tiles complying BDS ISO 13006: 2015, water absorbtion ≤ 0.5%, modulus of rupture (MOR) ≥ 27 N/mm ² , irrespective of color &/or design, with cement sand (F.M.≥ 1.2) mortar (1:4) base and raking out the joints with white cement including cutting and laying the tiles in proper way and finishing with care etc. all complete and accepted by the Engineer-in-charge. (Cement: CEM-II/A-M) In ground floor					
06.2.1	GP (mirror polished) 400 mm x 400 mm floor tiles	sqm	1649.00	1644.00	1618.00	1618.00
06.2.2	GP (mirror polished) 500 mm x 500 mm floor tiles	sqm	1788.00	1782.00	1757.00	1757.00
06.2.3	GP (mirror polished) 600 mm x 600 mm floor tiles	sqm	1969.00	1963.00	1937.00	1937.00
06.2.4	GP (mirror polished) 800 mm x 800 mm floor tiles	sqm	2107.00	2101.00	2076.00	2076.00
06.2.5	GP (mirror polished) 600 mm x 900 mm floor tiles	sqm	2371.00	2365.00	2339.00	2339.00
06.2.6	GP (mirror polished) 600 mm x 1200 mm floor tiles	sqm	2801.00	2795.00	2769.00	2769.00
06.3	Supplying, fitting and fixing country made homogeneous matt finished/ rustic floor tiles complying BDS ISO 13006: 2015, water absorbtion ≤ 0.5%, modulus of rupture (MOR) ≥ 27 N/mm ² , irrespective of color &/or design, with cement sand (F.M.≥ 1.2) mortar (1:4) base and raking out the joints with white cement including cutting and laying the tiles in proper way and finishing with care etc. all complete and accepted by the Engineer-in-charge. (Cement: CEM-II/A-M) In ground floor					
06.3.1	Matt or rustic floor tiles of size 400 mm x 400 mm and below	sqm	1719.00	1713.00	1687.00	1687.00

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06.3.2	Matt or rustic floor tiles of size 600 mm x 600 mm and below	sqm	1941.00	1935.00	1909.00	1909.00
06.4	Supplying, fitting and fixing foreign (China or equivalent) made polished pocelain/ mirror polished homogeneous floor tiles complying BDS ISO 13006: 2015, water absorbtion \leq 0.5%, modulus of rupture (MOR) \geq 35 N/mm ² , irrespective of color &/or design, with cement sand (F.M. \geq 1.2) mortar (1:4) base and raking out the joints with white cement including cutting and laying the tiles in proper way and finishing with care etc. all complete and accepted by the Engineer-in-charge. (Cement: CEM-II/A-M) In ground floor					
06.4.1	Polish pocelain/ mirror polished 600 mm x 600 mm floor tiles	sqm	2593.00	2587.00	2561.00	2561.00
06.4.2	Polished pocelain/ mirror polished 800 mm x 800 mm floor tiles	sqm	2870.00	2864.00	2838.00	2838.00
06.4.3	Polished pocelain/ mirror polished 600 mm x 1200 mm floor tiles	sqm	4673.00	4667.00	4641.00	4641.00
06.4.4	Polished pocelain/ mirror polished 1000 mm x 1000 mm floor tiles	sqm	6060.00	6054.00	6028.00	6028.00
06.4.5	Polished pocelain/ mirror polished 1200 mm x 1200 mm floor tiles	sqm	7446.00	7441.00	7415.00	7415.00
06.5	Supplying, fitting and fixing foreign (China or equivalent) made homogeneous matt finished/ rustic floor tiles complying BDS ISO 13006: 2015, water absorbtion \leq 0.5%, modulus of rupture (MOR) \geq 27 N/mm ² , irrespective of color &/or design, with cement sand (F.M. \geq 1.2) mortar (1:4) base and raking out the joints with white cement including cutting and laying the tiles in proper way and finishing with care etc. all complete and accepted by the Engineer-in-charge. (Cement: CEM-II/A-M) In ground floor					
06.5.1	Matt or rustic floor tiles of size 600 mm x 600 mm	sqm	3009.00	3003.00	2977.00	2977.00

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Item No.	Description of Item	Unit	Unit Rate of Railway Division In Taka			
			Dhaka	Chattogram	Paksey	Lalmoinrhat
06.6	Supplying, fitting and fixing country made glazed wall tiles complying BDS ISO 13006: 2015, irrespective of color &/or design, with 20 mm thick cement sand (F.M.≥ 1.2) mortar (1:3) base and raking out the joints with white cement including cutting, laying and hire charge of machine and finishing with care etc. including cost of water, electricity and other charges complete in all respect and accepted by the Engineer-in-charge. (Cement: CEM-II/A-M). In ground floor					
06.6.1	Wall tiles less than, equal or equivalent to 250 mm x 330 mm in sizes	sqm	1752.00	1739.00	1679.00	1679.00
06.6.2	Wall tiles more than 250 mm x 330 mm & less than or equal to 250 mm x 400 mm in sizes	sqm	1988.00	1975.00	1915.00	1915.00
06.6.3	Wall tiles more than 250 mm x 400 mm & less than or equal to 300 mm x 600 mm in sizes	sqm	2266.00	2252.00	2192.00	2192.00
06.6.4	Decor wall tiles of any size	sqm	2515.00	2502.00	2442.00	2442.00
06.6.5	Border wall tiles of any size	sqm	4831.00	4818.00	4758.00	4758.00
06.7	Supplying, fitting and fixing country made rustic or matt finished wall tiles complying BDS ISO 13006: 2015, irrespective of color &/or design, with 20 mm thick cement sand (F.M.≥ 1.2) mortar (1:3) base and raking out the joints with white cement including cutting, laying and hire charge of machine and finishing with care etc. including water, electricity and other charges complete in all respect and accepted by the Engineer-in-charge. (Cement: CEM-II/A-M). In ground floor					
06.7.1	Matt or rustic wall tiles less than or equal to 300 mm x 600 mm size	sqm	2363.00	2350.00	2290.00	2290.00
06.8	Supplying, fitting and fixing foreign (China or equivalent) made glazed wall tiles complying BDS ISO 13006: 2015, irrespective of color &/or design, with 20 mm thick cement sand (F.M.≥ 1.2) mortar (1:3) base and raking out the joints with white cement including cutting, laying and hire charge of machine and finishing with care etc. including water, electricity and other charges complete in all respect and accepted by the Engineer-in-charge. (Cement: CEM-II/A-M). In ground floor					
06.8.1	Glazed wall tiles 300 mm x 600 mm in sizes along with machining floor tiles, decor and border (if any)	sqm	3306.00	3293.00	3233.00	3233.00

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06.9	Supplying, fitting and fixing foreign (China or equivalent) made rustic or matt finished wall tiles complying BDS ISO 13006: 2015, irrespective of color &/or design, with 20 mm thick cement sand (F.M.≥ 1.2) mortar (1:3) base and raking out the joints with white cement including cutting, laying and hire charge of machine and finishing with care etc. including water, electricity and other charges complete in all respect and accepted by the Engineer-in-charge. (Cement: CEM-II/A-M). In ground floor					
06.9.1	Matt or rustic wall tiles 300 mm x 600 mm in sizes along with matching floor tiles, decor and border tiles (if any)	sqm	3306.00	3293.00	3233.00	3233.00
06.10	Supplying, fitting and fixing country made GP homogeneous stair tiles having non skidding offsets, complying BDS ISO 13006: 2015, water absorbtion ≤ 0.5%, modulus of rupture (MOR) ≥ 27 N/mm ² , irrespective of color &/or design, with cement sand (F.M.≥ 1.2) mortar (1:4) base and raking out the joints with white cement including cutting and laying the tiles in proper way and finishing with care etc. all complete and accepted by the Engineer-in-charge. (Cement: CEM-II/A-M) In ground floor					
06.10.1	Glazed stair tiles having size of width 250 mm to 300 mm and length 300 mm	sqm	1455.00	1450.00	1424.00	1424.00
06.10.2	Glazed stair tiles having size of width 250 mm to 300 mm and length 325 mm to 600 mm	sqm	1858.00	1852.00	1826.00	1826.00
06.11	Supplying, fitting and fixing country made rustic or matt finished stair tiles complying BDS ISO 13006: 2015, water absorbtion ≤ 0.5%, modulus of rupture (MOR) ≥ 27 N/mm ² , irrespective of color &/or design, with 20 mm thick cement sand (F.M.≥ 1.2) mortar (1:3) base and raking out the joints with white cement including cutting, laying and hire charge of machine and finishing with care etc. including water, electricity and other charges complete in all respect and accepted by the Engineer-in-charge. (Cement: CEM-II/A-M). In ground floor					
06.11.1	Rustic stair tiles of size 300 mm x 600 mm	sqm	1760.00	1755.00	1729.00	1729.00

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06.12	Supplying, fitting and fixing foreign (China or equivalent) made GP homogeneous stair tiles having non skidding offsets, complying BDS ISO 13006: 2015, water absorption $\leq 0.5\%$, modulus of rupture (MOR) ≥ 27 N/mm ² , irrespective of color &/or design, with cement sand (F.M. ≥ 1.2) mortar (1:4) base and raking out the joints with white cement including cutting and laying the tiles in proper way and finishing with care etc. all complete and accepted by the Engineer-in-charge. (Cement: CEM-II/A-M) In ground floor					
06.12.1	Glazed stair tiles of size 300 mm x 600 mm	sqm	2038.00	2032.00	2006.00	2006.00
06.13	Supplying, fitting and fixing foreign (China or equivalent) made rustic or matt finished stair tiles complying BDS ISO 13006: 2015, water absorption $\leq 0.5\%$, modulus of rupture (MOR) ≥ 27 N/mm ² , irrespective of color &/or design, with 20 mm thick cement sand (F.M. ≥ 1.2) mortar (1:3) base and raking out the joints with white cement including cutting, laying and hire charge of machine and finishing with care etc. including water, electricity and other charges complete in all respect and accepted by the Engineer-in-charge. (Cement: CEM-II/A-M). In ground floor					
06.13.1	Rustic stair tiles of size 300 mm x 600 mm	sqm	1830.00	1824.00	1798.00	1798.00
06.14	Supplying, fitting and fixing country made floor tiles complying BDS ISO 13006: 2015, water absorption $\leq 0.5\%$, modulus of rupture (MOR) ≥ 27 N/mm ² , irrespective of color &/or design, with adhesives in full thickness of tiles, filler/tiles grout including cutting, shaping, placing in proper level etc. all complete and accepted by the Engineer in charge. In ground floor					
06.14.1	GP glazed / unglazed homogenous floor tiles (400 mm x 400 mm)	sqm	2207.00	2195.00	2134.00	2134.00
06.14.2	GP glazed / unglazed homogenous floor tiles (300 mm x 300 mm)	sqm	1450.00	1444.00	1414.00	1414.00
06.14.3	GP Mirror Polished floor tiles (300 mm x 300 mm)	sqm	1520.00	1513.00	1483.00	1483.00
06.14.4	GP Mirror Polished floor tiles (400 mm x 400 mm)	sqm	1756.00	1749.00	1719.00	1719.00
06.14.5	GP Mirror Polished floor tiles (600 mm x 600 mm)	sqm	2075.00	2068.00	2038.00	2038.00
06.14.6	GP Mirror Polished floor tiles (800 mm x 800 mm)	sqm	2213.00	2207.00	2176.00	2176.00
06.14.7	GP Mirror Polished floor tiles (600 mm x 900 mm)	sqm	2477.00	2470.00	2440.00	2440.00

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06.15	Supplying, fitting and fixing foreign made (China or equivalent) floor tiles complying BDS ISO 13006: 2015, water absorption $\leq 0.5\%$, modulus of rupture (MOR) ≥ 27 N/mm ² , irrespective of color &/or design, with adhesives in full thickness of tiles, filler/tiles grout including cutting, shaping, placing in proper level etc. all complete as direction of the Engineer in charge. In ground floor					
06.15.1	GP Mirror Polished floor tiles (600 mm x 600 mm)	sqm	2699.00	2692.00	2662.00	2662.00
06.15.2	GP Mirror Polished floor tiles (800 mm x 800 mm)	sqm	2976.00	2970.00	2939.00	2939.00
06.15.3	GP Mirror Polished floor tiles (600 mm x 1200 mm)	sqm	4779.00	4772.00	4742.00	4742.00
06.16	Supplying, fitting and fixing 20mm to 25mm thick machine made cement pavement tiles having minimum compressive strength of 27 MPa, irrespective of color &/or design, with 20 mm thick cement sand (F.M. ≥ 1.2) mortar (1:4) base and making the joints carefully in true straight line including cutting, laying and hire charge of machine and finishing with care etc. including water, electricity and other charges complete in all respect and accepted by the Engineer-in-charge. (Cement: CEM-II/A-M). In ground floor					
06.16.1	Pavement tiles of size 300 mm x 300 mm	sqm	1206.00	1200.00	1174.00	1174.00
06.17	Supplying, fitting and fixing machine made clay roof tiles with ridge tiles on RCC inclined slab, irrespective of color &/or design, water absorption capacity $<6\%$ with 20 mm thick cement sand (F.M. ≥ 1.2) mortar (1:3) base and making the joints carefully in true straight line including cutting, laying and hire charge of machine and finishing with care etc. including water, electricity and other charges complete in all respect and accepted by the Engineer-in-charge. (Cement: CEM-II/A-M). In ground floor					
06.17.1	Roof tiles of size 100 mm x 200 mm or equivalent (red colour)	sqm	3177.00	3164.00	3104.00	3104.00
06.17.2	Roof tiles of size 125 mm x 170 mm to 200 mm x 200 mm or equivalent (red colour)	sqm	3577.00	3564.00	3504.00	3504.00
06.17.3	Roof tiles of size 160 mm x 268 mm or equivalent (red colour)	sqm	3303.00	3290.00	3230.00	3230.00
06.17.4	Roof tiles of size 225 mm x 300 mm or larger (red)	sqm	3386.00	3373.00	3313.00	3313.00
06.17.5	Flower shaped roof tiles of size 175 mm x 175 mm or equivalent (red colour)	sqm	4249.00	4236.00	4176.00	4176.00
06.17.6	Roof tiles of size 100 mm x 200 mm or equivalent (beige colour)	sqm	3151.00	3137.00	3077.00	3077.00

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06.17.7	Roof tiles of size 125 mm x170 mm to 200 mm x 200 mm or equivalent (beige colour)	sqm	3705.00	3692.00	3632.00	3632.00
06.17.8	Roof tiles of size 225 mm x 300 mm or larger (beige colour)	sqm	3636.00	3623.00	3563.00	3563.00
06.17.9	Flower shaped roof tiles of size 175 mm x 175 mm or equivalent (beige colour)	sqm	4412.00	4399.00	4339.00	4339.00
06.17.10	Roof tiles of size 125 mm x 170 mm to 200 mm x 200 mm or equivalent (grey or black colour)	sqm	3705.00	3692.00	3632.00	3632.00
06.17.11	Flower shaped roof tiles of size 175 mm x 175 mm or equivalent (grey or black colour)	sqm	4773.00	4760.00	4700.00	4700.00
06.18	Marble stone flooring with Indian standard quality (Bansowara/ Indian grey/ Indian pink or equivalent) marble stone of approved quality, texture and size with 25 mm thick cement sand (F.M.≥ 1.2) mortar (1:2) including placing cement slurry below the stone, cutting the marble stone to desired size, grinding and finishing the edges, setting in position in proper level, filling the gaps with white cement and colouring pigments including supplying all necessary equipments/materials and finishing the top by pumice stone and necessary auxiliary materials and water, electricity and other charges complete in all respect and accepted by the Engineer in charge.(Cement: CEM-II/A-M).					
06.18.1	18 mm thick marble stone flooring	sqm	8005.00	7998.00	7901.00	7901.00
06.18.2	16 mm thick marble stone flooring	sqm	7476.00	7470.00	7373.00	7373.00
06.19	Marble stone flooring with Indian superior quality marble stone of approved quality, texture and size with 25 mm thick cement sand (F.M.≥ 1.2) mortar (1:2) including placing cement slurry below the stone, cutting the marble stone to desired size, grinding and finishing the edges, setting in position in proper level, filling the gaps with white cement and colouring pigments including supplying all necessary equipments/materials and finishing the top by pumice stone and necessary auxiliary materials and water, electricity and other charges complete in all respect and accepted by the Engineer in charge. (Cement: CEM-II/A-M)					
06.19.1	18 mm thick marble stone flooring	sqm	8665.00	8658.00	8562.00	8561.00
06.19.2	16 mm thick marble stone flooring	sqm	7608.00	7602.00	7505.00	7505.00

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06.20.1	Supplying and setting 12 mm thick Indian standard quality (Bansowara/ Indian grey/ Indian pink or equivalent) marble stone of approved quality, texture and size on wall with 12 mm thick cement sand (F.M.≥ 1.2) mortar (1:2) including cutting and grinding the marble stone slab/tile, setting in position keeping horizontal and vertical alignment correct, filling the joints with white cement, cutting and grinding the top surface, finishing etc including water, electricity and other charges complete in all respect and accepted by the Engineer-in-charge. (Cement: CEM-II/A-M) In ground floor	sqm	6925.00	6918.00	6822.00	6822.00
06.20.2	Supplying and setting 12 mm thick Indian superior quality marble stone of approved quality, texture and size on wall with 12 mm thick cement sand (F.M.≥ 1.2) mortar (1:2) including cutting and grinding the marble stone slab/tile, setting in position keeping horizontal and vertical alignment correct, filling the joints with white cement, cutting and grinding the top surface, finishing etc including water, electricity and other charges complete in all respect and accepted by the Engineer-in-charge. (Cement: CEM-II/A-M) In ground floor	sqm	7321.00	7314.00	7218.00	7218.00
06.21.1	Marble stone flooring with 18mm thick Italian or equivalent marble stone of approved quality, texture and size over 25 mm thick cement sand (F.M.≥ 1.2) mortar (1:2) including. placing cement slurry below the stone, cutting the marble stone to desired size, grinding and finishing the edges, setting in position in proper level, filling the gaps with white cement and colouring pigments including supplying all necessary equipments/materials and finishing the top by pumice stone and necessary auxiliary materials and water, electricity and other charges complete in all respect and accepted by the Engineer-in-charge. (Cement: CEM-II/A-M). In ground floor.	sqm	10514.00	10508.00	10411.00	10411.00

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06.21.2	Supplying and setting 12 mm thick Italian or equivalent quality marble stone on wall of approved quality, texture and size on wall with 12 mm thick cement sand (F.M.≥ 1.2) mortar (1:2) including cutting and grinding the marble stone slab/tile, setting in position keeping horizontal and vertical alignment correct, filling the joints with white cement, cutting and grinding the top surface, finishing etc including water, electricity and other charges complete in all respect and accepted by the Engineer-in-charge. (Cement: CEM-II/A-M) In ground floor	Sqm	9831.00	9824.00	9728.00	9728.00
06.22	Labour cost for making moulding in marble stone as per architectural drawing including cutting, grinding, finishing, supplying necessary equipment etc. complete in all respect and accepted by the Engineer in Charge. (Cement: CEM-II/A-M).					
06.22.1	18 mm thick marble stone	meter	475.00	473.00	454.00	454.00
06.22.2	16 mm thick marble stone	meter	470.00	468.00	449.00	449.00
06.22.3	12 mm thick marble stone	meter	399.00	397.00	383.00	383.00
06.23	Granite stone flooring with 18mm thick Indian or equivalent granite stone of approved quality, texture and size over 25 mm thick cement sand (F.M.≥ 1.2) mortar (1:2) including. placing cement slurry below the stone, cutting the granite stone to desired size, grinding and finishing the edges, setting in position in proper level. filling the gaps with white cement and colouring pigments including supplying all necessary equipments/materials and finishing the top by pumice stone and necessary auxiliary materials and water, electricity and other charges complete in all respect and accepted by the Engineer-in-charge. (Cement: CEM-II/A-M) In ground floor	sqm	9193.00	9187.00	9090.00	9090.00









Item No.	Description of Item	Unit	Unit Rate of Railway Division In Taka			
			Dhaka	Chattogram	Paksey	Lalmonirhat
06.24	Granite stone flooring with 18mm thick Italian or equivalent origin granite stone of approved quality, texture and size over 25 mm thick cement sand (F.M.≥ 1.2) mortar (1:2) including. placing cement slurry below the stone, cutting the granite stone to desired size, grinding and finishing the edges, setting in position in proper level, filling the gaps with white cement and colouring pigments including supplying all necessary equipments/materials and finishing the top by pumice stone and necessary auxiliary materials and water, electricity and other charges complete in all respect and accepted by the Engineer-in-charge. (Cement: CEM-II/A-M) In ground floor	sqm	10514.00	10508.00	10411.00	10411.00
06.25	Supplying and setting 12 mm thick Indian or equivalent granite stone of approved quality, texture and size on wall with 12 mm thick cement sand (F.M.≥ 1.2) mortar (1:2) including cutting and grinding the granite stone slab, setting in position keeping horizontal and vertical alignment correct, filling the joints with white cement, cutting and grinding the top surface, finishing etc including water, electricity and other charges complete in all respect and accepted by the Engineer-in-charge. (Cement: CEM-II/A-M) In ground floor	sqm	7189.00	7182.00	7086.00	7086.00
06.26	Supplying and setting 12 mm thick Italian or equivalent granite stone of approved quality, texture and size on wall with 12 mm thick cement sand (F.M.≥ 1.2) mortar (1:2) including cutting and grinding the granite stone slab, setting in position keeping horizontal and vertical alignment correct, filling the joints with white cement, cutting and grinding the top surface, finishing etc including water, electricity and other charges complete in all respect and accepted by the Engineer-in-charge. (Cement: CEM-II/A-M) In ground floor	sqm	8510.00	8503.00	8407.00	8407.00
06.27	Extra rate for each additional floor for tiles works					
06.27.1	Add for each additional floor up to 5th floor	sqm	12.00	12.00	11.00	11.00
06.27.2	Add for each additional floor for 6th floor to 9th floor	sqm	26.00	26.00	24.00	24.00
06.27.3	Add for each additional floor for 10th floor and above	sqm	38.00	37.00	34.00	34.00
06.28	Extra rate for each additional floor for marble and granite stone works					
06.28.1	Add for each additional floor up to 5th floor	sqm	18.00	18.00	17.00	17.00

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Item No.	Description of Item	Unit	Unit Rate of Railway Division In Taka			
			Dhaka	Chattogram	Paksey	Lalmonirhat
06.28.2	Add for each additional floor for 6th floor to 9th floor	sqm	33.00	32.00	30.00	30.00
06.28.3	Add for each additional floor for 10th floor and above	sqm	44.00	43.00	40.00	40.00

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Item No.	Description of Item	Unit	Unit Rate of Railway Division In Taka			
			Dhaka	Chattogram	Paksey	Lalmonirhat

CHAPTER 07: REINFORCED CEMENT CONCRETE (RCC) WORKS

Item No.	Description of Item	Unit	Unit Rate of Railway Division In Taka			
			Dhaka	Chattogram	Paksey	Lalmonirhat
	RCC WORKS: 1:2:4 (measured on gross concrete section) (F_c = 17 MPa, minimum f_{cr} = 24 MPa in nominal mix 1:2:4), with brick-chips (Sand of (F.M.≥ 1.2) and F.M. ≥ 2.2 in equal proportion)					
07.1	Reinforced cement concrete works with minimum cement content relates to mix ratio 1:2:4 and maximum water cement ratio = 0.45 having minimum average f _{cr} = 24 MPa (Laboratory), satisfying a specified compressive strength f _c = 17 MPa (Field) at 28 days on standard cylinders as per standard practice of Code ACI/BNBC/ASTM, cement conforming to BDS EN-197-1-CEM-I, 52.5N (52.5 MPa) / ASTM-C 150 Type – I, best quality sand [50% quantity of best local sand (F.M.≥ 1.2) and 50% quantity of Sylhet sand or coarse sand of equivalent minimum (F.M.≥ 2.2)] and 20 mm down well graded picked jhama brick chips conforming to ASTM C-33 including breaking chips and screening, making and placing shutter in position maintaining true to plumb, making shutter water-tight properly, placing reinforcement in position; mixing in standard mixer machine with hopper fed by standard measuring boxes or in batching plant, casting in forms, compacting by vibrator machine and curing at least for 28 days, removing centering-shuttering after specified time approved; including cost of water, electricity, testing of materials and cylinders if required including other charges etc. all complete, approved and accepted by the Engineer-in-charge (Rate is excluding the cost of reinforcement and its fabrication, placing, binding, and testing of materials and cylinders etc.					
07.1.1	Individual & combined footing, pile cap, raft/mat, floor slab and foundation beam up to plinth level (Retail)	cum	10664.00	10661.00	10409.00	10403.00
07.1.1a	Individual & combined footing, pile cap, raft/mat, floor slab and foundation beam up to plinth level (Bulk)	cum	10351.00	10349.00	10097.00	10091.00

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Item No.	Description of Item	Unit	Unit Rate of Railway Division In Taka			
			Dhaka	Chattogram	Paksey	Lalmonirhat
07.1.2	Pedestal, column, column capital, lift wall and wall up to ground floor (Retail)	cum	10982.00	10975.00	10703.00	10698.00
07.1.2a	Pedestal, column, column capital, lift wall and wall up to ground floor (Bulk)	cum	10670.00	10663.00	10392.00	10386.00
07.1.3	Floor / roof slab, T-beam, L-beam and rectangular beam, tie beam, lintel, stair case slab and step etc. up to ground floor (Retail)	cum	10791.00	10787.00	10526.00	10521.00
07.1.3a	Floor / roof slab, T-beam, L-beam and rectangular beam, tie beam, lintel, stair case slab and step etc. up to ground floor (Bulk)	cum	10479.00	10475.00	10215.00	10209.00
07.1.4	Cornice, railing, drop wall, louver, fins, sunshade, false ceiling, waffle and ribbed floor slab etc. up to ground floor (Retail)	cum	11301.00	11289.00	10999.00	10993.00
07.1.4a	Cornice, railing, drop wall, louver, fins, sunshade, false ceiling, waffle and ribbed floor slab etc. up to ground floor (Bulk)	cum	10988.00	10977.00	10686.00	10681.00
	RCC WORKS: 1:2:4 (measured on gross concrete section) (f'c = 20 MPa, minimum f'cr = 28.5 MPa in nominal mix 1:2:4), with stone chips (100% sand of (F.M.≥ 2.2))					
07.2	Reinforced cement concrete works with minimum cement content relates to mix ratio 1:2:4 and maximum water cement ratio = 0.40 having minimum average f'cr = 28.5 MPa (Laboratory), satisfying a specified compressive strength f'c = 20 MPa (Field) at 28 days on standard cylinders as per standard practice of Code ACI/BNBC/ASTM, cement conforming to BDS EN-197-1-CEM-I, 52.5N (52.5 MPa) / ASTM-C 150 Type - I, best quality Sylhet sand or coarse sand of equivalent minimum (F.M.≥ 2.2) and 20 mm down well graded stone chips conforming to ASTM C-33, making and placing shutter in position maintaining true to plumb, making shutter water-tight properly, placing reinforcement in position; mixing in standard mixer machine with hopper fed by standard measuring boxes or in batching plant, casting in forms, compacting by vibrator machine and curing at least for 28 days, removing centering-shuttering after specified time approved; including cost of water, electricity, testing of materials and cylinders if required including other charges etc. all complete, approved and accepted by the Engineer-in-charge (Rate is excluding the cost of reinforcement and its fabrication, placing, binding, and testing of materials and cylinders etc.)					

Item No.	Description of Item	Unit	Unit Rate of Railway Division In Taka			
			Dhaka	Chattogram	Paksey	Lalmonirhat
07.2.1	Individual & combined footing, pile cap, raft/mat, floor slab and foundation beam up to plinth level (Retail)	cum	14796.00	15025.00	13988.00	13590.00
07.2.1a	Individual & combined footing, pile cap, raft/mat, floor slab and foundation beam up to plinth level (Bulk)	cum	14484.00	14713.00	13676.00	13278.00
07.2.2	Pedestals, column, column capital, lift wall and RCC wall up to ground floor (Retail)	cum	15115.00	15339.00	14283.00	13885.00
07.2.2a	Pedestals, column, column capital, lift wall and RCC wall up to ground floor (Bulk)	cum	14803.00	15026.00	13971.00	13573.00
07.2.3	Floor / roof slab, T-beam, L-beam and rectangular beam, tie beam, lintel, stair case slab and steps etc. up to ground floor (Retail)	cum	14924.00	15150.00	14106.00	13708.00
07.2.3a	Floor / roof slab, T-beam, L-beam and rectangular beam, tie beam, lintel, stair case slab and steps etc. up to ground floor (Bulk)	cum	14612.00	14838.00	13794.00	13396.00
07.2.4	Cornice, railing, drop wall, louver, fins, sunshade, false ceiling, waffle and ribbed floor slab etc. up to ground floor (Retail)	cum	15434.00	15652.00	14578.00	14180.00
07.2.4a	Cornice, railing, drop wall, louver, fins, sunshade, false ceiling, waffle and ribbed floor slab etc. up to ground floor (Bulk)	cum	15122.00	15340.00	14266.00	13868.00
	RCC WORKS: 1:1.5:3(measured on gross concrete section) (f_c = 25 MPa, minimum f_{cr} = 33.5 MPa in nominal mix 1 : 1.5 : 3), with stone chips (100% sand of (F.M.≥ 2.2))					

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Item No.	Description of Item	Unit	Unit Rate of Railway Division In Taka			
			Dhaka	Chattogram	Paksey	Lalmonirhat
07.3	Reinforced cement concrete works with minimum cement content relates to mix ratio 1:1.5:3 and maximum water cement ratio 0.40 having minimum $f_{cr} = 33.5$ MPa (Laboratory), satisfying a specified compressive strength $f_c = 25$ MPa (Field) at 28 days on standard cylinders as per standard practice of Code ACI/BNBC/ASTM, Cement conforming to BDS EN-197-1-CEM-I, 52.5N (52.5 MPa) / ASTM-C 150 Type - I, best quality Sylhet sand or coarse sand of equivalent minimum (F.M. \geq 2.2) and 20 mm down well graded stone chips conforming to ASTM C-33, making and placing shutter in position and maintaining true to plumb, making shutter water-tight properly, placing reinforcement in position; mixing with standard mixer machine with hopper, fed by standard measuring boxes or in batching plant, casting in forms, compacting by vibrator machine and curing at least for 28 days, removing centering-shuttering after specified time approved; including cost of water, electricity, testing of materials and cylinders if required including other the field office, including foundations, access roads, shades, layout of electrical and water supply and hard standings thereto for the approval of the Engineer-in-charge. The Engineer-in-charge may require					
07.3.1	Individual & combined footing, pile cap, raft/mat, floor slab and foundation beam up to plinth level (Retail)	cum	15024.00	15234.00	14273.00	13906.00
07.3.1a	Individual & combined footing, pile cap, raft/mat, floor slab and foundation beam up to plinth level (Bulk)	cum	14643.00	14852.00	13892.00	13525.00
07.3.2	Pedestals, column, column capital, lift wall and RCC wall up to ground floor (Retail)	cum	15343.00	15547.00	14568.00	14201.00
07.3.2a	Pedestals, column, column capital, lift wall and RCC wall up to ground floor (Bulk)	cum	14961.00	15166.00	14187.00	13820.00
07.3.3	Floor / roof slab, T-beam, L-beam and rectangular beam, tie beam, lintel, stair case slab and steps etc. upto ground floor (Retail)	cum	15151.00	15359.00	14391.00	14024.00
07.3.3a	Floor / roof slab, T-beam, L-beam and rectangular beam, tie beam, lintel, stair case slab and steps etc. upto ground floor (Bulk)	cum	14770.00	14978.00	14010.00	13643.00

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Item No.	Description of Item	Unit	Unit Rate of Railway Division in Taka			
			Dhaka	Chattogram	Paksey	Lalmonirhat
07.3.4	Cornice, railing, drop wall, louver, fins, sunshade, false ceiling, waffle and ribbed floor slab etc. up to ground floor (Retail)	cum	15661.00	15861.00	14864.00	14496.00
07.3.4a	Cornice, railing, drop wall, louver, fins, sunshade, false ceiling, waffle and ribbed floor slab etc. up to ground floor (Bulk)	cum	15280.00	15479.00	14482.00	14115.00
	RCC WORKS : 1:1.25:2.5 (measured on gross concrete section) (f_c = 32 MPa, minimum f_{cr} = 40.5 MPa in nominal mix 1 : 1.25 : 2.5)With Stone Chips and Admixture (high strength concrete) (100% sand of (F.M.≥ 2.2))					
07.4	Reinforced cement concrete works with minimum cement content relates to mix ratio 1:1.25:2.5 and maximum water cement ratio 0.40 having minimum f _{cr} = 40.5 MPa (Laboratory), satisfying a specified compressive strength f _c = 32 MPa (Field) at 28 days on standard cylinders as per standard practice of Code ACI/BNBC/ASTM, Cement conforming to BDS EN-197-1-CEM-I, 52.5N (52.5 MPa)/ ASTM-C 150 Type – I, and adding approved high range water reducing admixture of complying specific type (generally be Type-G) under ASTM-C 494, best quality coarse sand [Sylhet sand or coarse sand of equivalent minimum (F.M.≥ 2.2) , 20 mm down well graded crushed stone chips conforming to ASTM C-33, including screening sand through proper sieves, making and placing shutter in position and maintaining true to plumb, making shutter water-tight properly, placing reinforcement in position; mixing with standard mixer machine with hopper and fed by standard measuring boxes or in batching plant, casting in forms, compacting by vibrator machine and curing at least for 28 days,removing centering-shuttering after specified time approved; including cost of water, electricity, testing of materials and cylinders if required including other charges etc. all complete, approved and accepted by the Engineer-in-charge (Rate is excluding the cost of reinforcement and its fabrication, placing, binding, and testing of materials and cylinders etc.)					
07.4.1	Individual & combined footing, pile cap, raft/mat, floor slab and foundation beam up to plinth level (Retail)	cum	15494.00	15696.00	14769.00	14414.00

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Item No.	Description of Item	Unit	Unit Rate of Railway Division In Taka			
			Dhaka	Chattogram	Paksey	Lalmonirhat
07.4.1a	Individual & combined footing, pile cap, raft/mat, floor slab and foundation beam up to plinth level (Bulk)	cum	15057.00	15258.00	14331.00	13977.00
07.4.2	Padestal, column, column capital, lift wall and RCC wall up to ground floor (Retail)	cum	15813.00	16009.00	15063.00	14710.00
07.4.2a	Padestal, column, column capital, lift wall and RCC wall up to ground floor (Bulk)	cum	15375.00	15572.00	14625.00	14272.00
07.4.3	Floor / roof slab, T-beam, L-beam and rectangular beam, tie beam, lintel, stair case slab and steps etc. up to ground floor (Retail)	cum	15622.00	15821.00	14886.00	14532.00
07.4.3a	Floor / roof slab, T-beam, L-beam and rectangular beam, tie beam, lintel, stair case slab and steps etc. up to ground floor (Bulk)	cum	15184.00	15383.00	14449.00	14095.00
07.4.4	Cornice, railing, drop wall, louver, fins, sunshade, false ceiling, waffle and ribbed floor slab etc. up to ground floor (Retail)	cum	16131.00	16323.00	15358.00	15004.00
07.4.4a	Cornice, railing, drop wall, louver, fins, sunshade, false ceiling, waffle and ribbed floor slab etc. up to ground floor (Bulk)	cum	15694.00	15885.00	14921.00	14567.00
	RCC WORKS: 1:1:2 (measured on gross concrete section) (f_c = 40 MPa, minimum f_{cr} = 50 MPa in nominal mix 1 : 1 : 2) With stone chips (high strength concrete) (100% sand of (F.M. ≥ 2.2))					

Item No.	Description of Item	Unit	Unit Rate of Railway Division In Taka			
			Dhaka	Chattogram	Paksey	Lalmonirhat
07.5	Reinforced cement concrete works with minimum cement content relates to mix ratio 1:1:2 having minimum $f_{cr} = 50$ MPa, satisfying a specified compressive strength $f_c = 40$ MPa at 28 days on standard cylinders as per standard practice of Code ACI/BNBC/ASTM, Cement conforming to BDS EN-197-1-CEM-I, 52.5N (52.5 MPa) / ASTM-C 150 Type – I, and adding approved high range water reducing admixture of complying specific type (generally be Type-G) under ASTM-C 494, best quality coarse sand [Sylhet sand or coarse sand of equivalent (F.M. ≥ 2.2)], 20 mm down well graded crushed stone chips conforming to ASTM C 33, making and placing shutter in position and maintaining true to plumb, making shutter water-tight properly, placing reinforcement in position; mixing with standard mixer machine with hopper and fed by standard measuring boxes or in batching plant, casting in forms, compacting by vibrator machine and curing at least for 28 days, removing centering-shuttering after specified time approved; including cost of water, electricity, testing charges of materials and cylinders required by engineer, other charges etc. all complete approved and accepted by the Engineer-in-charge. (Doses of admixture to be fixed in consultation with design office) (Rate is excluding the cost of reinforcement and its fabrication, placing, binding etc and the cost of shuttering & centering)					
07.5.1	Individual & combined footing, pile cap, raft/mat, floor slab and foundation beam up to plinth level (Retail)	cum	16222.00	16413.00	15529.00	15193.00
07.5.1a	Individual & combined footing, pile cap, raft/mat, floor slab and foundation beam up to plinth level (Bulk)	cum	15702.00	15893.00	15009.00	14673.00
07.5.2	Pedestal, column, column capital, lift wall and RCC wall upto ground floor (Retail)	cum	16541.00	16727.00	15824.00	15488.00
07.5.2a	Pedestal, column, column capital, lift wall and RCC wall upto ground floor (Bulk)	cum	16021.00	16207.00	15304.00	14968.00
	Fair-faced RCC WORKS: 1:1.5:3 (measured on gross concrete section) ($f_c = 25$ MPa, minimum $f_{cr} = 33.5$ MPa in nominal mix 1:1.5:3) (100% sand of (F.M. ≥ 2.2))					

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Item No.	Description of Item	Unit	Unit Rate of Railway Division In Taka			
			Dhaka	Chattogram	Paksey	Lalmonirhat
07.6	Cast-in-place fair-faced concrete works with $f_{cr}=33.5$ MPa and $f_c=25$ MPa at 28 days on standard cylinders by using 75% of OPC and 25% of white cement conforming to BDS EN-197-1-CEM I, 52.5N (52.5 MPa) / ASTM-C 150 Type - I, best quality Sylhet sand or coarse sand of equivalent (F.M. ≥ 2.2), 20 mm down and well graded stone chips conforming to ASTM C-33 at mix ratio of 1:1.5:3, adding coloring pigment as per architectural design, conforming to the standard practice of code ACI/BNBC/ASTM including screening sand and chips through proper sieves, washing, making and placing shutter in position maintaining true to plumb, making shutter water tight properly, placing reinforcement in position, including pouring of concrete in form, compacting by vibrator machine and curing at least for 28 days, removing centering-shuttering after specified time approved; including cost of water, electricity, testing charges of materials and cylinders as required, other charges etc. all complete, approved and accepted by the Engineer, electricity, testing charges of materials and cylinders required by engineer, other charges etc. all complete approved and accepted by th					
07.6.1	For column, wall, beam, slab, drop wall, cornice etc. up to ground floor (Retail)	cum	18215.00	18411.00	17398.00	17031.00
07.6.1a	For column, wall, beam, slab, drop wall, cornice etc. up to ground floor (Bulk)	cum	17929.00	18125.00	17112.00	16745.00
07.7	Extra rate for RCC works/fair-faced concrete works (materials, consumables and laying/placing concrete) in column, column capital, lift wall & wall, T- beam, L-beam, rectangular beams, floor / roof slab, cantilever slab, waffle slab and drop panels where the free height of the structure exceeds 4 meter (rate is considered for each additional meter height)	cum	338.00	333.00	310.00	310.00
07.8	Extra rate for RCC work/fair-faced work in additional floor: concrete					
07.8.1	Add for each additional floor up to 5th floor	cum	139.00	129.00	119.00	119.00
07.8.2	Add for each additional floor for 6th floor to 9th floor	cum	189.00	175.00	162.00	162.00
07.8.3	Add for each additional floor for 10th floor & above	cum	238.00	234.00	217.00	217.00
	FORM WORK (Steel)					

Item No.	Description of Item	Unit	Unit Rate of Railway Division In Taka			
			Dhaka	Chattogram	Paksey	Lalmonirhat
07.9	Centering and shuttering, including strutting, propping etc. (The formwork must be rigid enough both in and out of plane, to make the concrete surface true to the designed shape and size by using necessary MS sheets of minimum 16 BWG, angles of minimum size 40 mm x 40 mm x 5 mm, flat bars etc.) and removal of form for:					
07.9.1	Individual and combined footing	sqm	580.00	577.00	566.00	566.00
07.9.2	In raft/mat/floor slab up to plinth level	sqm	585.00	582.00	569.00	569.00
07.9.3	Foundation beam	sqm	488.00	487.00	481.00	481.00
07.9.4	Pedestal, column, column capital, lift wall and wall up to ground floor	sqm	520.00	519.00	514.00	514.00
07.9.5	Tie beam and lintel: ground floor	sqm	543.00	541.00	535.00	535.00
07.9.6	T-beam, L-beam and rectangular beam etc up to ground floor	sqm	573.00	572.00	567.00	567.00
07.9.7	Floor and roof slab up to ground floor	sqm	663.00	662.00	655.00	655.00
07.9.8	Cornice, railing, drop walls, louver, fins etc.: ground floor	sqm	486.00	485.00	478.00	478.00
07.9.10	Stair case slab and steps up to ground floor	sqm	549.00	548.00	544.00	544.00
07.9.11	Waffle or ribbed floor upto ground floor	sqm	726.00	725.00	719.00	719.00
07.9.12.1	Arches, domes, vaults up to 8m span (for single use)	sqm	2362.00	2361.00	2357.00	2357.00
07.9.12.2	Arches, domes, vaults up to 8 m span (for 2-times use)	sqm	1654.00	1653.00	1650.00	1650.00
07.9.12.3	Arches, domes, vaults up to 8 m span (for 3-times use)	sqm	1181.00	1181.00	1179.00	1179.00
07.9.12.4	Arches, domes, vaults up to 8 m span (for more than 3-times use)	sqm	827.00	827.00	825.00	825.00
07.10	Extra rate for arches, domes, vaults exceeding 8 m span	sqm	591.00	591.00	590.00	590.00
07.11	Extra rate for shuttering in circular work	sqm	115.00	115.00	114.00	114.00
07.12	Extra rate for additional height in centering, shuttering where ever required with adequate bracing, propping etc. over a height of 4.0 m, for every additional height of 1 metre or part thereof.	sqm	57.00	57.00	57.00	57.00
07.13	Extra rate for formwork/shuttering in additional floor					
07.13.1	Add for each addl. floor up to 5th floor	sqm	50.00	49.00	46.00	46.00
07.13.2	Add for each addl. floor for 6th floor to 9th floor	sqm	79.00	77.00	72.00	72.00
07.13.3	Add for each addl. floor for 10th floor & above	sqm	107.00	105.00	98.00	98.00

Item No.	Description of Item	Unit	Unit Rate of Railway Division In Taka			
			Dhaka	Chattogram	Paksey	Lalmoinihat
07.14	Extra rate of formwork for making 'fair-faced' surface of the concrete as per design, drawing and direction of Engineer-in-charge. (The formwork must be rigid enough both in and out of plane, to make the concrete surface true to the designed shape and size by using necessary MS sheets of minimum 10 BWG, angles of minimum size 50 mm x 50 mm x 6 mm, flat bars, formwork releasing agent etc.)	sqm	482.00	481.00	477.00	477.00
	FORMWORK (Wooden) for boundary wall, gate, centry post etc.					
07.15	Centering and shuttering, including strutting, propping etc. and removal of form for:					
07.15.1	Individual and combined footings	sqm	523.00	520.00	502.00	502.00
07.15.2	Foundation beam	sqm	475.00	474.00	458.00	458.00
07.15.3	Padestals, column, wall	sqm	526.00	525.00	508.00	508.00
07.15.4	Tie beam & lintels	sqm	521.00	520.00	502.00	502.00
07.15.5	T-beam, L-beam and rectangular beam	sqm	508.00	507.00	490.00	490.00
07.15.6	Floor & roof slab	sqm	561.00	557.00	552.00	552.00
07.15.7	Cornice, railing, drop wall, louver, fins etc.	sqm	459.00	458.00	445.00	445.00
07.15.8	Sunshade, false ceiling	sqm	471.00	471.00	459.00	459.00
07.15.9	Stair case slab and steps upto ground floor	sqm	457.00	457.00	445.00	445.00

Item No.	Description of Item	Unit	Unit Rate of Railway Division In Taka			
			Dhaka	Chattogram	Paksey	Lalmonirhat
07.16	Supply and use of specified type chemical admixture delivered from an authorized local agent or manufacturer, complying with the ASTM C-494 requirements; conforming the current compliance of the admixture to specification requirements like physical properties, uniformity and equivalence in composition etc.; performance (water content, fresh concrete setting time and compressive strength) requirements, delivered in sealed water-tight containers confirming plainly marked product name & type under this specification, net weight and /or volume, manufacturing and expiry date, non aggressiveness to environment, aggregates and metals in concrete etc. and mixing the admixture in non pre-stressed cement concrete mixture in the field in accordance with manufacturers recommendation and instruction; providing safety provisions in all respects etc. all complete as per instruction and approved by the Engineer-in-charge. Dose (quantity in millilitres per 50 kg bag cement) and brand/origin/ manufacturer with respect to particular brand of cement and particular stock of aggregates and method of use to be determined by mix design / trial mix at the cost of contractor and approved by the Engineer. (Use of admixture is subjected to prior approval of design office)					
07.16.1	Supply and use of water reducing chemical admixture in concrete, complying ASTM C-494 Type - A of approved brand / origin / manufacturer and supplied by only manufacturer's authorised dealer with certificate of origin. The admixture is to reduce quantity of mixing water required for normal workability and to maintain low water-cement (W/C) ratio, for improved concrete quality ensurance.	liter	205.00	204.00	203.00	203.00
07.16.2	Supply and use of retarding chemical admixture in concrete, complying ASTM C-494 Type - B of approved brand/origin/manufacturer and supplied by only manufacturer's authorised dealer with certificate of origin. The admixture for retarding setting time of concrete, there by reducing shrinkage in concrete specially for concrete laid in thick layers and intended delayed construction for improved construction joints, re-concreting etc.	liter	217.00	217.00	215.00	215.00

Item No.	Description of Item	Unit	Unit Rate of Railway Division In Taka			
			Dhaka	Chattogram	Paksey	Lalmonirhat
07.16.3	Supply and use of accelerating chemical admixture in concrete, complying ASTM C-494 Type - C of approved brand/origin/manufacturer and supplied by only manufacturer's authorised dealer with certificate of origin. An admixture that is to accelerate the setting time and early strength gain of concrete.	liter	156.00	155.00	154.00	154.00
07.16.4	Supply and use of water-reducing and retarding chemical admixture in concrete, complying ASTM C-494 Type - D of approved brand/origin/manufacturer and supplied by only manufacturer's authorised dealer with certificate of origin. The admixture to reduce the quantity of mixing water required to produce concrete of given consistency, i.e. low water-cement (W/C) ratio and intend to retard setting time of concrete, specially for layered, thick laid concrete etc.	liter	278.00	278.00	277.00	277.00
07.16.5	Supply and use of water-reducing and accelerating chemical admixture in concrete, complying ASTM C-494 Type - E of approved brand/origin/manufacturer and supplied by only manufacturer's authorised dealer with certificate of origin. The admixture to reduce the quantity of mixing water required to produce concrete of given consistency, i.e. low water-cement (W/C) ratio and intend to accelerate setting time of concrete, and early strength gain in concrete etc.	liter	242.00	241.00	240.00	240.00
07.16.6	Supply and use of water-reducing high range chemical admixture in concrete, complying ASTM C-494 Type - F of approved brand/origin/manufacturer and supplied by only manufacturer's authorised dealer with certificate of origin. The admixture required to produce concrete of consistency by 12% or greater (flowing concrete) and for higher strength of concrete.	liter	278.00	278.00	277.00	277.00

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Item No.	Description of Item	Unit	Unit Rate of Railway Division In Taka			
			Dhaka	Chattogram	Paksey	Lalmonirhat
07.16.7	Supply and use of water-reducing high range and retarding chemical admixture in concrete, complying ASTM C-494 Type - G of approved brand/origin/manufacture and supplied by only manufacturer's authorised dealer with certificate of origin. The admixture required to produce concrete of consistency by 12% or greater (flowing concrete) and for higher strength of concrete and intend to retard setting time of concrete.	liter	211.00	211.00	209.00	209.00
07.17	Supply and use of best quality pliable, cold applied pre-formed self adhesive rubberized/bituminous water proofing membrane of approved brand / origin / manufacturer from an authorized local agent or manufacturer having minimum thickness 1.5 mm, lined with 2 ply cross laminated high density polyethylene film performances and properties all conforming to ASTM standards and laying, placing, fixing on made up firm and dry surfaces free from hollows, sharp protrusions, contaminates etc. laid over-lap by at least 75 mm along the edges and 125 mm at ends ensuring good initial bond with the surfaces all complete under the strict accordance with the manufacturer recommendations and instructions providing all safety provisions in all respects and accepted by the Engineer. (supplied by only manufacturer's authorised dealer with certificate of origin) under following specification:					
	Backing(HDPE) thickness: minimum 0.10mm Membrane thickness : minimum 1.40mm Total thickness: minimum 1.50mm Cold flexibility: greater than (-)200C:ASTM D146 Pliability: "No crack" tested in ASTM D146 Tensile strength (film only):min 3.50 MPa(35000kN/m ²) testing in ASTM D882 Tensile strength (composite) :at least 2.40 MPa or N/mm ² Elongation (composite): min 300% (P.T.O)					
	Cycling over crack at (-) 320C :No effect 100 cycles ASTM C836-89a Puncture resistance : greater than 240N ASTM E 154-88					

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Item No.	Description of Item	Unit	Unit Rate of Railway Division In Taka			
			Dhaka	Chattogram	Paksey	Lalmonirhat
	Resistance to hydrostatic head: at least 50m ASTM D5385 Tear resistance: min 4.0 MPa (N/mm ²) Adhesion to primed concrete : min 4.0 N/mm : ASTM D1000 Water vapor transmission :Less than 0.10g/m ² per hour : ASTM E96 Water absorption in 24 hour : Less than 0.33% ASTM D570 Heat stability: (+) 900C					
07.17.1	Water-proofing membrane on external surface of primed vertical or inclined wall /on plastered and primed back-wall and concrete cast against membrane. (Excluding cost of back fill/brick wall on back/plaster when membrane laid on back-wall and concrete cast against membrane which to be paid as per corresponding items in this schedule)	sqm	1044.00	1041.00	1029.00	1029.00
07.17.2	Water-proofing membrane on made up surface below the floor or below the horizontal surfaces with temporary protective cover using polysterene/38 mm thick sand-cement mortar in 4:1 /or by equally effective alternative. (Rate is excluding the cost of protective cover which to be paid as per corresponding items in this schedule)	sqm	895.00	893.00	886.00	886.00
07.17.3	Water-proofing membrane on the floor or on the horizontal surfaces with permanent protective cover & wearing coarse. (Rate is excluding the cost of protective cover and wearing coarse which to be paid as per corresponding items in this schedule)	sqm	930.00	929.00	921.00	921.00

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Item No.	Description of Item	Unit	Unit Rate of Railway Division In Taka			
			Dhaka	Chattogram	Paksey	Lalmonirhat
07.18	Supply of polymer based curing compound as per ASTM C 309 or BS 7542-1992 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 and accepted by Engineer-in-charge.	sqm	218.00	215.00	206.00	206.00
7.19	Supply of epoxy bonding agent following ASTM C881 / C881M - 14 or any international acceptable standard and apply over the old concrete surface after making free of standing water, removal of dust, laitance, grease, curing compounds, impregnations, waxes and any other contaminants to achieve optimum bonding in between fresh and old concrete and accepted by the Engineer-in-charge.	sqm	1088.00	1083.00	1068.00	1068.00
07.20	Supply of best quality salt guard coating on concrete surface following ASTM B117 delivered from authorized local agent of the manufacturer in a sealed container and apply by a firm experienced in applying salt guard coating or workers trained and approved by manufacturer to wall and ceiling in 2 coats elapsing specified time for drying/ recoating including cleaning and sand papering making the surface free from loose and efflorescence, flaky materials, dirt, grease, wax, polish, scraping all chalked and scaled materials, applying the paint by brush/spray following manufacturer's written instructions and necessary scaffolding etc. all complete and accepted by the Engineer-in-charge	sqm	47.00	46.00	45.00	45.00

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Item No.	Description of Item	Unit	Unit Rate of Railway Division In Taka			
			Dhaka	Chattogram	Paksey	Lalmonirhat

CHAPTER 08: M.S. FABRICATION AND CONSTRUCTION JOINT IN RCC WORKS

Item No.	Description of Item	Unit	Unit Rate of Railway Division In Taka			
			Dhaka	Chattogram	Paksey	Lalmonirhat
08.1	Supplying, fabrication and fixing to detail as per design : ribbed or deformed bar reinforcement for Reinforced cement concrete, produced and marked in accordance with BDS ISO 6935 - 2: 2016 (or equivalent standard subsequently released from BSTI) ,ASTM- A-615:2020 including straightening and cleaning rust, if any, bending and binding in position with supply of G.I. wires (excluding splices or laps) etc. 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 (B300 C-R for Ductility Class C or B300 DWR for Ductility Class D): Ribbed or Deformed bar produced and marked as per BDS ISO 6935-2:2016 with minimum yield strength, f_y (R_{eH}) = 300 MPa satisfying the ratio tested ultimate strength, f_u (R_m) to tested yield strength (f_y) shall be at least 1.25 and minimum elongation after fracture (A) & minimum total elongation at maximum force (Agt) is 16% & 7%, respectively for Ductility Class C and 17% & 8%, respectively for Ductility Class D or equivalent ASTM A 615 with tensile strength shall not be less than 1.25 times the actual yield strength. (Retail)	kg	115.00	115.00	114.00	114.00
08.1.1a	Grade 300 (B300 C-R for Ductility Class C or B300 DWR for Ductility Class D): Ribbed or Deformed bar produced and marked as per BDS ISO 6935-2:2016 with minimum yield strength, f_y (R_{eH}) = 300 MPa satisfying the ratio tested ultimate strength, f_u (R_m) to tested yield strength (f_y) shall be at least 1.25 and minimum elongation after fracture (A) & minimum total elongation at maximum force (Agt) is 16% & 7%, respectively for Ductility Class C and 17% & 8%, respectively for Ductility Class D or equivalent ASTM A 615 with tensile strength shall not be less than 1.25 times the actual yield strength. (Bulk)	kg	111.00	111.00	110.00	110.00

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Item No.	Description of Item	Unit	Unit Rate of Railway Division In Taka			
			Dhaka	Chattogram	Paksey	Lalmonirhat
08.1.2	Grade 400 (B 400 CWR for Ductility Class C or B 400 DWR for Ductility Class D): Ribbed or Deformed bar produced and marked as per BDS ISO 6935-2:2016 with minimum yield strength, f_y (ReH) = 400 MPa satisfying the ratio of tested ultimate strength, $f_u(Re)$ to tested yield strength (f_y) shall be at least 1.25 and minimum elongation after fracture (A) & minimum total elongation at maximum force (Agt) is 14% & 7%, respectively for Ductility Class C and 17% & 8%, respectively for Ductility Class D or equivalent ASTM A 615 with tensile strength shall not be less than 1.25 times the actual yield strength. (Retail)	kg	125.00	125.00	124.00	124.00
08.1.2a	Grade 400 (B 400 CWR for Ductility Class C or B 400 DWR for Ductility Class D): Ribbed or Deformed bar produced and marked as per BDS ISO 6935-2:2016 with minimum yield strength, f_y (ReH) = 400 MPa satisfying the ratio of tested ultimate strength, $f_u(Re)$ to tested yield strength (f_y) shall be at least 1.25 and minimum elongation after fracture (A) & minimum total elongation at maximum force (Agt) is 14% & 7%, respectively for Ductility Class C and 17% & 8%, respectively for Ductility Class D equivalent ASTM A 615 with tensile strength shall not be less than 1.25 times the actual yield strength. (Bulk)	kg	122.00	122.00	121.00	121.00
08.2	Extra rate for M.S. Fabrication work in additional floor shall be incorporated in the estimate					
08.2.1	Add for each additional floor up to 5th floor	kg	0.61	0.60	0.55	0.55
08.2.2	Add for each additional floor for 6th floor to 9th floor	kg	1.28	1.26	1.17	1.17
08.2.3	Add for each additional floor for 10th floor and above	kg	1.89	1.86	1.72	1.72
08.3	Mild steel, Grade 250 with minimum $f_y = 250$ MPa, work in roof truss : supplying and fabrication of mild steel sections as per design, hoisting, fitting and fixing in position with bolt and nuts or rivets or welds and providing two coats of anti-corrosive paint over a prime coat of red oxide paint etc. complete and accepted by the Engineer-in-charge. (Measurement to be given for truss member only).	kg	205.00	203.00	197.00	197.00
08.4	Supplying fan hook 300-grade (RB 300) of 16 mm diameter M.S. rod (one meter straight length) having rounded hook at the middle of bar in proper size so as to be concealed within fan cup including fabrication, fitting and fixing in all floor accepted by the Engineer-in-charge.	each	169.00	168.00	163.00	163.00

Item No.	Description of Item	Unit	Unit Rate of Railway Division In Taka			
			Dhaka	Chattogram	Paksey	Lalmonirhat
08.5	Installation of water stopper at movable and immovable RCC green joints as per following specification.					
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	1207.00	1201.00	1164.00	1164.00
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	1207.00	1201.00	1164.00	1164.00
08.6	Supplying, fitting and fixing 250 mm wide 16 SWG Aluminium 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	375.00	374.00	370.00	370.00

Item No.	Description of Item	Unit	Unit Rate of Railway Division In Taka			
			Dhaka	Chattogram	Paksey	Lalmonirhat
08.7	Providing bearing joints fixed or free with 250 mm x 375 mm x 10 mm M.S. (Grade - A36) shoe plate fitted in the truss angles with 16 mm diameter M.S. rod counter sunk rivets, welded and anchored to 250 x 375 x 10 mm. M.S shoe plate by two Nos. 19 mm dia M.S. "U" rod embedded in the bed of the lintel around the reinforcement, cleaning and greasing the joints for all floors etc. all complete and accepted by the Engineer-in-charge	each	3069.00	3061.00	3030.00	3030.00

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Item No.	Description of Item	Unit	Unit Rate of Railway Division In Taka			
			Dhaka	Chattogram	Paksey	Lalmonirhat
CHAPTER 09: PILE WORKS AND PILE TEST						
Item No.	Description of Item	Unit	Unit Rate of Railway Division In Taka			
			Dhaka	Chattogram	Paksey	Lalmonirhat
09.1	Boring/drilling by wash or percussion method for cast in situ pile up to the required depth and diameter with minimum 6 m long temporary steel casing, true to vertical, providing bentonite slurry and maintaining water level in the hole, washing the hole for at least 30 minutes, cleaning the bore hole and making the bore hole ready for placing steel cage and concreting including hiro charge of rig set with winch machine, tripod stand, tremie pipe, cost of fuel, lubricant, mobilization, demobilization, maintenance, spares, stand-byes, insurance coverage, water, electricity and other charges all compete, approved and accepted by the Engineer-in-charge. Before commencing boring operation, contractor shall submit the method statement of cast-in-situ pile work including sequence of boring and casting, disposal of spoils, test result of materials to the Engineer-in-charge for approval. However, Engineer's approval shall not relieve the contractor of his responsibilities and obligations under contract.					
09.1.1	400 mm dia	meter	699.00	694.00	676.00	676.00
09.1.2	450 mm dia	meter	898.00	891.00	868.00	868.00
09.1.3	500 mm dia	meter	1049.00	1041.00	1014.00	1014.00
09.1.4	550 mm dia	meter	1257.00	1247.00	1216.00	1216.00
09.1.5	600 mm dia	meter	1601.00	1590.00	1554.00	1554.00









Item No.	Description of Item	Unit	Unit Rate of Railway Division In Taka			
			Dhaka	Chattogram	Paksey	Lalmonirhat
09.2	Auger Boring/Rotary drilling for cast in situ pile up to the required depth and diameter with minimum 6 m long temporary steel casing, true to vertical, providing bentonite slurry and maintaining water level in the hole, washing the hole for at least 30 minutes, cleaning the bore-hole and making the bore- hole ready for placing steel cage and concreting including hire charge of rig set , trimie pipe, cost of fuel, lubricant, mobilization, demobilization, maintenance, spares, stand-byes, insurance coverage, bentonite, water, electricity and other charges all compete approved and accepted by the Engineer-in-charge. Before commencing boring operation, contractor shall submit the method statement of cast-in-situ pile work including sequence of boring and casting, disposal of spoils, test result of materials to the Engineer-in-charge for approval. However, Engineer's approval shall not relieve the contractor of his responsibilities and obligations under contract.					
09.2.1	600 mm dia	meter	3650.00	3644.00	3627.00	3627.00
09.2.2	750 mm dia	meter	4380.00	4373.00	4353.00	4353.00
09.2.3	1000 mm dia	meter	6083.00	6074.00	6045.00	6045.00
09.3	Removing of spoils / mud accumulated during boring for cast in situ pile by wash boring from working site to a safe distance by contractor's own arrangement i.e. with container set in truck or on cart including loading, unloading everything complete as per standard practice and accepted by the Engineer-in-charge. (Quantity should be given three times of solid volume of boring)	cum	744.00	742.00	689.00	689.00

Item No.	Description of Item	Unit	Unit Rate of Railway Division In Taka			
			Dhaka	Chattogram	Paksey	Lalmonirhat
09.4	Cast in situ pile with reinforced cement concrete works of high slump (ASTM C494 Type A or F) with minimum cement content relates to mix ratio 1 : 1.5 : 3 having minimum fcr = 29.5 MPa (Laboratory), and satisfying a specified compressive strength f _c = 21 MPa (Field) at 28 days on standard cylinders as per standard practice of Code ACI/BNBC/ASTM & cement conforming to BDS EN-197-1- CEM - 1, 52.5 N / ASTM-C 150 Type - I, best quality coarse sand [Sylhet sand or coarse sand of equivalent F.M. ≥ 2.2], 20 mm down well graded crushed stone chips conforming to ASTM C-33, including breaking chips, screening through proper sieves, making, placing re-bar cage in position, placing and removing tri-pod as per requirement, pouring the concrete in bore-hole with the help of a tremie pipe, maintaining the tremie pipe immersed in concrete by at least 1 meter throughout the period of concreting, maintaining required slump, etc. mixing the aggregates with standard mixer machine with hopper, casting in forms, all complete including water, electricity, testing of materials and concrete etc and other charges as per design, drawing etc all complete approved and accepted by the Engineer-in-charge. (Rate is excluding the cost of reinforcement and its fabrication, binding, welding, placing and admixture (approx doses 150 to 250 ml per bag of cement which is to be fixed upon consultation with design office)	cum	16666.00	16894.00	15830.00	15426.00
09.5	Providing and making point welding at contact point of the spiral binders at reasonable intervals with the main reinforcements by electric arc welding for construction of cast in situ bored pile carefully with highly oxidized electrodes, making the points prominent and accepted by the Engineer in-charge (Rate is inclusive of all materials labour, tools and plants, electricity and all equipment).	point	4.00	4.00	4.00	4.00
09.6	Providing and making welded splice over two sides of contact by welding of minimum 300 mm length at the lap of main reinforcement in re-bar cage to be placed in bore-hole where necessary by electric arc welding with highly oxidized electrodes making the joint prominent all complete and accepted by the Engineer-in-charge. (Rate is inclusive of all materials labour, tools and plants, electricity and all equipment).	meter of weld	676.00	676.00	676.00	676.00

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Item No.	Description of Item	Unit	Unit Rate of Railway Division In Taka			
			Dhaka	Chattogram	Paksey	Lalmonirhat
09.7	Labour for breaking head of hardened cast in situ bored pile/pre-cast pile up to a required length by any means but without damaging the rest and removing the dismantled materials such as concrete to a safe distance including scraps and cleaning concrete from steel/M.S. rods, straightening and bending of pile bars, preparation and making platform where necessary, carrying, all sorts of handling, stacking the same properly after clearing, leveling and dressing the situ and clearing the bed etc. complete in all respect and accepted by the Engineer-in-charge. (Measurement will be given for the actual pile head volume to be broken)	cum	3625.00	3548.00	3301.00	3301.00
09.8	Conducting static load test as per ASTM D1143 or equivalent standard for the cast-in-situ/pre-cast pile providing required scaffolding, bracing, jacks, pressure test gauge, loading unloading, Kentledge and other plants and equipment including staging, mobilization, demobilization, hire charge, gunny bags, sand and filling sacs/gunny bags for loading, record readings and preparation of results in standard forms and other incidental charges as per standard practice and procedures including submission of load test report, furnishing all graph and chart etc. complete in all respect approved and accepted by the Engineer-in-charge (Minimum two cyclic loading; one at service load and another cycle at double the service load then to continue loading till failure of the pile). Before commencing load test, contractor shall submit method statement for conducting load test to the Engineer-in-charge for approval. However, Engineer's approval shall not relieve the Contractor of his responsibilities and obligations under Cothe field office, including foundations, access roads, shades, layout of electrical and water supply and hard standings thereto for the approval of the Engineer-in-charge. The Engineer-in-charge may require revision of the plans prior to giving approval for construction. The					
09.8.1	Mobilization & de-mobilization of testing equipment	per set	5644.00	5644.00	5154.00	5154.00
09.8.2	Calibration of pressure gauge	per set	6626.00	6626.00	6626.00	6626.00
09.8.3	For 50 tonne load					
09.8.3.1	For first test at one site for one testing set	per test	96076.00	95825.00	94452.00	94452.00
09.8.3.2	For 2nd & additional tests at same site for same testing set	per test	86468.00	86243.00	85007.00	85007.00
09.8.4	For 100 tonne load					

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Item No.	Description of Item	Unit	Unit Rate of Railway Division In Taka			
			Dhaka	Chattogram	Paksey	Lalmonirhat
09.8.4.1	For first test at one site for one testing set	per test	161658.00	161439.00	159576.00	159576.00
09.8.4.2	For 2nd & additional tests at same site for same testing set	per test	145492.00	145295.00	143618.00	143618.00
09.8.5	For 150 tonne load					
09.8.5.1	For first test at one site for one testing set	per test	227242.00	227054.00	224702.00	224702.00
09.8.5.2	For 2nd & additional tests at same site for same testing set	per test	204518.00	204348.00	202231.00	202231.00
09.8.6	For 200 tonne load					
09.8.6.1	For first test at one site for one testing set	per test	293561.00	293380.00	290501.00	290501.00
09.8.6.2	For 2nd & additional tests at same site for same testing set	per test	264205.00	264042.00	261451.00	261451.00
09.8.7	For 250 tonne load					
09.8.7.1	For first test at one site for one testing set	per test	360249.00	360124.00	356854.00	356854.00
09.8.7.2	For 2nd & additional tests at same site for same testing set	per test	324224.00	324111.00	321168.00	321168.00
09.8.8	For 300 tonne load					
09.8.8.1	For first test at one site for one testing set	per test	426569.00	426450.00	422654.00	422654.00
09.8.8.2	For 2nd & additional tests at same site for same testing set	per test	383912.00	383805.00	380388.00	380388.00
09.8.9	For 350 tonne load					
09.8.9.1	For first test at one site for one testing set	per test	490802.00	490740.00	486552.00	486552.00
09.8.9.2	For 2nd & additional tests at same site for same testing set	per test	441722.00	441666.00	437897.00	437897.00
09.8.10	For 400 tonne load					
09.8.10.1	For first test at one site for one testing set	per test	555036.00	555029.00	550450.00	550450.00
09.8.10.2	For 2nd & additional tests at same site for same testing set	per test	499532.00	499526.00	495405.00	495405.00
09.9	Rate for incremental loading					
09.9.1	For intermediate loading from 50 tonne to 100 tonne for each additional tonne					
09.9.1.1	For first test at one site for one testing set	tonne	1312.00	1312.00	1302.00	1302.00
09.9.1.2	For 2nd & additional tests at same site for same testing set	tonne	1180.00	1181.00	1172.00	1172.00
09.9.2	For intermediate loading from 100 tonne to 150 tonne for each additional tonne.					
09.9.2.1	For first test at one site for one testing set	tonne	1312.00	1312.00	1303.00	1303.00
09.9.2.2	For 2nd & additional tests at same site for same testing set	tonne	1181.00	1181.00	1172.00	1172.00

Item No.	Description of Item	Unit	Unit Rate of Railway Division In Taka			
			Dhaka	Chattogram	Paksey	Lalmonirhat
09.9.3	For intermediate loading from 150 tonne to 200 tonne for each additional tonne.					
09.9.3.1	For first test at one site for one testing set	tonne	1326.00	1327.00	1316.00	1316.00
09.9.3.2	For 2nd & additional tests at same site for same testing set	tonne	1194.00	1194.00	1184.00	1184.00
09.9.4	For Intermediate loading from 200 tonne to 250 tonne for each additional tonne.					
09.9.4.1	For first test at one site for one testing set	tonne	1334.00	1335.00	1327.00	1327.00
09.9.4.2	For 2nd & additional tests at same site for same testing set	tonne	1200.00	1200.00	1194.00	1194.00
09.9.5	For intermediate loading from 250 tonne to 300 tonne for each additional tonne.					
09.9.5.1	For first test at one site for one testing set	tonne	1326.00	1326.00	1316.00	1316.00
09.9.5.2	For 2nd & additional tests at same site for same testing set	tonne	1194.00	1194.00	1184.00	1184.00
09.9.6	For intermediate loading from 300 tonne to 350 tonne for each additional tonne.					
09.9.6.1	For first test at one site for one testing set	tonne	1285.00	1285.00	1278.00	1278.00
09.9.6.2	For 2nd & additional tests at same site for same testing set	tonne	1156.00	1156.00	1150.00	1150.00
09.9.7	For intermediate loading from 350 tonne to 400 tonne for each additional tonne.					
09.9.7.1	For first test at one site for one testing set	tonne	1285.00	1285.00	1278.00	1278.00
09.9.7.2	For 2nd & additional tests at same site for same testing set	tonne	1156.00	1285.00	1150.00	1150.00







Item No.	Description of Item	Unit	Unit Rate of Railway Division In Taka			
			Dhaka	Chattogram	Paksey	Lalmonirhat
09.10	Pre-cast pile made in reinforced cement concrete with minimum cement content relates to mix ratio 1:1.25:2.5 having minimum fcr = 38.5 MPa, and satisfying specified compressive strength f _c = 30 MPa at 28 days on standard cylinders as per standard practice of Code ACI/BNBC/ASTM & cement conforming to BDS EN-197-1- CEM-I (52.5 N) / ASTM-C 150 Type – I, best quality coarse sand (F.M.≥ 2.2), 20 mm down well graded crushed stone chips conforming to ASTM C-33, mixing in standard mixture machine and fed by standard measuring boxes, including all related works like screening through proper sieves, cleaning and washing, centering and shuttering with M.S sheet, M.S angle, F.I bar, nuts and bolts, champering edges if so, preparation of casting beds, laying polythene there in, placing reinforcement cages in position, casting, compacting by vibrators and tapered rods as where necessary, curing for 28 days etc. cost of water, electricity and other charges, providing fitting and fixing pile shoe in position, tools, plthe field office, including foundations, access roads, shades, layout of electrical and water supply and hard standings thereto for the approval of the Engineer-in-charge. The Engineer-in-charge may require revision of the plans prior to giving approval for constr					
09.10.1	250 mm x 250 mm size pre-cast pile (1:1.25:2.5) with stone chips (Retail)	meter	1208.00	1221.00	1158.00	1135.00
09.10.1a	250 mm x 250 mm size pre-cast pile (1:1.25:2.5) with stone chips (Bulk)	meter	1180.00	1192.00	1130.00	1107.00
09.10.2	300 mm x 300 mm size pre-cast pile (1:1.25:2.5) with stone chips (Retail)	meter	1686.00	1704.00	1614.00	1581.00
09.10.2a	300 mm x 300 mm size pre-cast pile (1:1.25:2.5) with stone chips (Bulk)	meter	1645.00	1663.00	1573.00	1540.00
09.10.3	350 mm x 350 mm size pre-cast pile (1:1.25:2.5) with stone chips (Retail)	meter	2222.00	2247.00	2126.00	2081.00
09.10.3a	350 mm x 350 mm size pre-cast pile (1:1.25:2.5) with stone chips (Bulk)	meter	2167.00	2191.00	2071.00	2026.00
09.10.4	400 mm x 400 mm size pre-cast pile (1:1.25:2.5) with stone chips (Retail)	meter	2867.00	2899.00	2742.00	2683.00
09.10.4a	400 mm x 400 mm size pre-cast pile (1:1.25:2.5) with stone chips (Bulk)	meter	2795.00	2827.00	2670.00	2611.00

Item No.	Description of Item	Unit	Unit Rate of Railway Division In Taka			
			Dhaka	Chattogram	Paksey	Lalmonirhat
09.10.5	450 mm x 450 mm size pre-cast pile (1:1.25:2.5) with stone chips (Retail)	meter	3581.00	3621.00	3423.00	3350.00
09.10.5a	450 mm x 450 mm size pre-cast pile (1:1.25:2.5) with stone chips (Bulk)	meter	3490.00	3530.00	3332.00	3259.00
09.11	Pre-cast pile shoe making & supplying pre-fabricated frustum of square cone having four sides and a toe made of 6 mm thick ASTM A36 complied MS steel plate jointed by line welding, 4 nos 12 mm dia deformed MS bar jointed by line welding with MS plate along the four edges of shoe aligning the corner main bar of the pile and 1-12mm dia bar to fix with and perpendicular to shoe toe plate aligning centre of pile, including cutting, shaping, sizing of MS plate and bar, all complete as per design & drawing and accepted by the Engineer-in-charge	each	3485.00	3455.00	3332.00	3332.00
09.12	Mobilization and demobilization of drop hammer type pre-cast pile driving rig.	per set per site	11964.00	11951.00	10921.00	10921.00
09.13	Driving 250 mm x 250 mm size pre-cast pile with drop hammer type rig, and maintaining driving log in prescribed format Before commencing driving operation, contractor shall submit method statement for carrying out the driving operation including sequence of driving to the Engineer-in-charge for approval. However, Engineer's approval shall not relieve the contractor of his responsibilities and obligations under contract.	meter	556.00	550.00	527.00	527.00
09.14	Driving 300 mm x 300 mm size pre-cast pile with drop hammer type rig, and maintaining driving log in prescribed format Before commencing driving operation, contractor shall submit method statement for carrying out the driving operation including sequence of driving to the Engineer-in-charge for approval. However, Engineer's approval shall not relieve the contractor of his responsibilities and obligations under contract.	meter	730.00	722.00	692.00	692.00

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Item No.	Description of Item	Unit	Unit Rate of Railway Division In Taka			
			Dhaka	Chattogram	Paksey	Lalmonirhat
09.15	Driving 350 mm x 350 mm size pre-cast pile with drop hammer type rig, and maintaining driving log in prescribed format. Before commencing driving operation, contractor shall submit method statement for carrying out the driving operation including sequence of driving to the Engineer-in-charge for approval. However, engineer's approval shall not relieve the contractor of his responsibilities and obligations under contract.	meter	973.00	962.00	923.00	923.00
09.16	Mobilization and demobilization of automatic diesel hammer mounted complete rig set.	per set per site	186508.00	186508.00	186508.00	186508.00
09.17	Driving 250 mm x 250 mm size pre-cast pile by rig fitted with automatic diesel operated hammer. Before commencing driving operation by rig fitted with automatic diesel operated hammer, contractor shall submit method statement for carrying out the operation including sequence of driving to the Engineer-in-charge for approval. However, engineer's approval shall not relieve the contractor of his responsibilities and obligations under contract.	meter	706.00	702.00	691.00	691.00
09.18	Driving 300 mm x 300 mm size pre-cast pile by rig fitted with automatic diesel operated hammer. Before commencing driving operation by rig fitted with automatic diesel operated hammer, contractor shall submit method statement for carrying out the operation including sequence of driving to the Engineer-in-charge for approval. However, engineer's approval shall not relieve the contractor of his responsibilities and obligations under contract.	meter	914.00	909.00	894.00	894.00
09.19	Driving 350 mm x 350 mm size pre-cast pile by rig fitted with automatic diesel operated hammer. Before commencing driving operation by rig fitted with automatic diesel operated hammer, contractor shall submit method statement for carrying out the operation including sequence of driving to the Engineer-in-charge for approval. However, engineer's approval shall not relieve the contractor of his responsibilities and obligations under contract.	meter	981.00	974.00	960.00	960.00

Item No.	Description of Item	Unit	Unit Rate of Railway Division In Taka			
			Dhaka	Chattogram	Paksey	Lalmonirhat
09.20	Driving 400 mm x 400 mm size pre-cast pile by rig fitted with automatic diesel operated hammer. Before commencing driving operation by rig fitted with automatic diesel operated hammer, contractor shall submit method statement for carrying out the operation including sequence of driving to the Engineer-in-charge for approval. However, engineer's approval shall not relieve the contractor of his responsibilities and obligations under contract.	meter	1036.00	1030.00	1013.00	1013.00
09.21	Driving 450 mm x 450 mm size pre-cast pile by rig fitted with automatic diesel operated hammer. Before commencing driving operation by rig fitted with automatic diesel operated hammer, contractor shall submit method statement for carrying out the operation including sequence of driving to the Engineer-in-charge for approval. However, engineer's approval shall not relieve the contractor of his responsibilities and obligations under contract.	meter	1110.00	1104.00	1085.00	1085.00
09.22	Pre-cast driven micro-pile with reinforced cement concrete works with minimum cement content relates to mix ratio 1:1.25:2.5 having minimum $f_{cr} = 38.5$ MPa, and satisfying a specified compressive strength $f'_c = 30$ MPa at 28 days on standard cylinders as per standard practice of Code ACI/BNBC/ASTM & cement conforming to BDS EN-197-1- CEM-I (52.5 N) / ASTM-C 150 Type - I, best quality coarse sand (F.M.2.5) and 20 mm down well-graded crushed stone chips conforming to ASTM C-33, mixing in standard mixture machine with hopper and fed by standard measuring boxes, including cost of breaking chips, screening through proper sieves, cleaning and washing, centering and shuttering with M.S sheet, M.S angle, F.I bar, nuts and bolts, preparation of bed, laying polythene, placing of reinforcement cage, casting, compacting by vibrators and tapered rods, curing for 28 days etc. including cost of water, electricity and other charges, providing pile shoe as per design and drawing, driving the pile up to the design depth as per standard practice or specified method providing head cushion, all equipments including mobilization, demobilization and hire charge of driving set, champering, test of materials and concrete etc. including carrying all complete approved and accepted by the Engineer-in-charge. (Rate is excluding the cost of reinforcement and its fabrication, binding, welding and placing)					

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Item No.	Description of Item	Unit	Unit Rate of Railway Division In Taka			
			Dhaka	Chattogram	Paksey	Lalmonirhat
09.22.1	Casting of 180 mm x 180 mm x 7.6 m Pile with reinforced cement concrete (1:1.25:2.5) with stone chips (Retail)	meter	637.00	643.00	611.00	600.00
09.22.1a	Casting of 180 mm x 180 mm x 7.6 m Pile with reinforced cement concrete (1:1.25:2.5) with stone chips (Bulk)	meter	623.00	629.00	597.00	586.00
09.22.2	Casting of 205 mm x 205 mm x 7.6 m Pile with reinforced cement concrete (1:1.25:2.5) with stone chips (Retail)	meter	798.00	805.00	764.00	750.00
09.22.2a	Casting of 205 mm x 205 mm x 7.6 m Pile with reinforced cement concrete (1:1.25:2.5) with stone chips (Bulk)	meter	780.00	787.00	746.00	732.00
09.22.3	Driving of 180 mm x 180 mm x 7.6 m pre-cast pile	meter	217.00	215.00	207.00	207.00
09.22.4	Driving of 205 mm x 205 mm x 7.6 m pre-cast pile	meter	261.00	258.00	248.00	248.00
09.22.5	Supply of Cold-Drawn Wire Pre-stressed Concrete (CWPC) micro-pile which is made by using cold drawn wire minimum cement content relates to mix ratio 1:1.5:3 cement conforming to BDS EN-197-1-CEM-1, 52.5N (52.5MPa) / ASTM-C 150 type - 1, having minimum $f_{cr} = 38.5$ MPa and satisfying specified compressive strength $f_c = 30$ MPa at 28 days best quality coarse sand ($F.M. \geq 2.2$), 20 mm down well graded stone chips conforming to ASTM C-33, mixing in standard mixture machine and fed by standard measuring boxes, including cost of all kind of reinforcement BDS ISO 6935-2:2006 including strengthening and cleaning rust if any bending and binding in position with supply of GI wires (24 BWG), centering and shuttering with M.S. sheet, M.S. angle, F.I. bar, nuts and bolts, preparation of bed, supplying & tensioning of cold drawn wire, laying polythene, placing of reinforcement cage in position, casting, compacting by vibrator and tapered rods, curing at least 28 days etc. including cost of water, electricity and other charges, proving pile shoe making with 20 BWG plane sheet, as per design and drawing including an equipments mobilization, demobilization champering edges if so including the cost of water electricity and other charges all complete as per design, drawing and accepted by the Engineer-in-charge. (Excluding the cost of carrying and driving of pile). Maximum length: Up to 7620mm (fixed size x-section: 180 mm x 180 mm)	meter	1358.00	1353.00	1309.00	1303.00

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Item No.	Description of Item	Unit	Unit Rate of Railway Division In Taka			
			Dhaka	Chattogram	Paksey	Lalmonirhat
09.23	PIT (Pile integrity test) : Conducting low strain dynamic testing of pile as per ASTM D5882-The standard method for low-strain integrity testing of pile by a qualified and approved PIT expert, preparing pile heads and providing all relevant materials, equipment, experts, labour, mobilization, demobilization, data acquisition and analysis, preparation of results in standard forms and compiling final report with recommendations on the tests etc. complete in all respect approved and accepted by the Engineer-in-charge. (Report shall contain driving log / boring and pouring logs, graphs & statement on "Calibration Pile" (pile that tested for its capacity and PIT done eralier on it, at a place of known soil profiles), soil investigation report. (Caliberation pile shall be made and tested first). Method statement for conducting PIT shall be submitted to the Engineer for approval, and shall be the part of PIT report, However, Engineer's approval shall not relieve the contractor of his responsibilities and obligations under contract					
09.23.1	Mobilization and demobilization to site and PIT on 12(twelve) piles or less	upto 1st 12 piles	34357.00	34357.00	34357.00	34357.00
09.23.2	For PIT test of each additional pile after 12(Twelve) pile tested at same site	per pile	1227.00	1227.00	1227.00	1227.00









Item No.	Description of Item	Unit	Unit Rate of Railway Division In Taka			
			Dhaka	Chattogram	Paksey	Lalmonirhat
09.24	Pre-cast spliced pile jointing by supplying, fitting, fixing prefabricated square shaped two steel caps made up by 6 mm thick ASTM A36 complied M.S plate, sides formed by bent in channel shape to have only two line of joinery on faces, having min 50 mm dia hole on its web; capping by min 12 mm thick ASTM A36 complied M.S plate shaping the edges in 45°, having min 40 mm dia hole at centre to pass 25 mm M.S bar 433 mm in length; jointed at channels root by welding; caps fitted with 2 nos BDS ISO 6935-2009: B400 DWR complied d20 U-bar 1244mm in length by welding, equidistant from centre holes of cap and shall have min 75 mm clear from pile faces; and finally, the system to be fitted in correct alignments on pile head positions waiting for concreting; both the pile heads fitted with the steel caps to be welded together through v-notches in field, while one of the companion segment of piles driven in ground and other one placed over it maintaining true verticality; all complete as per direction and stepwise approthe field office, including foundations, access roads					
09.24.1	X-sec of pre cast pile segments :300 mm x 300 mm	each	10746.95	10746.95	10746.95	10746.95
09.24.2	X-sec of pre cast pile segments :350 mm x 350 mm	each	11670.65	11670.65	11670.65	11670.65
09.24.3	X-sec of pre cast pile segments :400 mm x 400 mm	each	13283.34	13283.34	13283.34	13283.34
09.24.4	X-sec of pre cast pile segments :450 mm x 450 mm	each	13872.57	13872.57	13872.57	13872.57
09.25	Pile Driving by Hydraulic Static Pile Driver					
09.25.1	Mobilization and demobilization of hydraulic static pile driver(Upto 500 metric ton capacity)	per set per site	671429.00	671429.00	671429.00	671429.00
09.25.2. 1	Driving pre-cast pile of 300 mm x 300 mm X-section made with shoe/ without shoe by Hydraulic static pile driver of approx. 500 tonne (metric ton) capacity; arranged with necessary cranes, power source, maintaining driving log and record of pressure exerted on piles driven in to desired RL or capacity level ; complete in all respect including handling of piles, dressing & leveling of site, way making, surveying, layout setting etc ended with the submission of pile driving report in three copies duly signed by professional engineer and approved by the Engineer-in-charge.	meter	857.00	856.00	854.00	854.00

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Item No.	Description of Item	Unit	Unit Rate of Railway Division In Taka			
			Dhaka	Chattogram	Paksey	Lalmonirhat
09.25.2. 2	Driving pre-cast pile of 350 mm x 350 mm X-section made with shoe/ without shoe by Hydraulic static pile driver of approx. 500 tonne (metric ton) capacity; arranged with necessary cranes, power source, maintaining driving log and record of pressure exerted on piles driven in to desired RL or capacity level ; complete in all respect including handling of piles, dressing & leveling of site, way making, surveying, layout setting etc ended with the submission of pile driving report in three copies duly signed by professional engineer and approved by the Engineer-in-charge.	meter	923.00	922.00	920.00	920.00
09.25.2. 3	Driving pre-cast pile of 400 mm x 400 mm X-section made with shoe/ without shoe by hydraulic static pile driver of approx. 500 tonne (metric ton) capacity; arranged with necessary cranes, power source, maintaining driving log and record of pressure exerted on piles driven in to desired RL or capacity level ; complete in all respect including handling of piles, dressing & leveling of site, way making, surveying, layout setting etc ended with the submission of pile driving report in three copies duly signed by professional engineer and approved by the Engineer-in-charge.	meter	997.00	996.00	993.00	993.00
09.25.2. 4	Driving pre-cast pile of 450 mm x 450 mm X-section made with shoe/ without shoe by hydraulic static pile driver of approx. 500 tonne (metric ton) capacity; arranged with necessary cranes, power source, maintaining driving log and record of pressure exerted on piles driven in to desired RL or capacity level ; complete in all respect including handling of piles, dressing & leveling of site, way making, surveying, layout setting etc ended with the submission of pile driving report in three copies duly signed by professional engineer and approved by the Engineer-in-charge.	meter	1043.00	1042.00	1039.00	1039.00

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Item No.	Description of Item	Unit	Unit Rate of Railway Division In Taka			
			Dhaka	Chattogram	Paksey	Lalmonirhat
CHAPTER 10: STRUCTURAL STEEL WORKS, SHEET ROOFING AND SAFETY CANOPY						
Item No.	Description of Item	Unit	Unit Rate of Railway Division In Taka			
			Dhaka	Chattogram	Paksey	Lalmonirhat
10.1	Supply and fixing of galvanized anchor bolts of variable dia for rigid frame conforming to ASTM F1554 Grade 55, Galvanized to A153, Class C or equivalent with minimum yield strength of 380 MPa, manual of steel construction by American Institute of Steel Construction (AISC) etc. including the cost of washer & bolts, material testing etc. all complete as per drawing, specification and direction of the Engineer-in-charge.	kg	223.00	223.00	223.00	223.00
10.2	Supply, fabrication and installation of built-up sections i.e. columns, beams, rafters, bracings etc. from steel plates conforming to ASTM A572, with a minimum yield strength of 345 MPa , including the cost of testing of plates, application of red/grey-oxide primer etc. all complete as per drawing, specification and direction of Engineer-in-charge.	kg	148.00	148.00	148.00	148.00
10.3	Supply, fabrication and installation of built-up sections i.e. columns, beams, rafters, bracings etc. from steel plates conforming to ASTM A36, with a minimum yield strength of 275 MPa , including the cost of testing of plates, application of red/grey-oxide primer etc. all complete as per drawing, specification and direction of Engineer-in-charge.	kg	145.00	145.00	145.00	145.00
10.4	Supply, fabrication and installation of hot-rolled sections (W, H, I-shape, Channel, angle, tube etc.) for columns, beams, rafters, bracings etc. conforming to ASTM A36, with a minimum yield strength of 250 MPa , including the cost of testing of plates, application of red/grey-oxide primer etc. all complete as per drawing, specification and direction of Engineer-in-charge.	kg	141.00	141.00	141.00	141.00

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Item No.	Description of Item	Unit	Unit Rate of Railway Division In Taka			
			Dhaka	Chattogram	Paksey	Lalmonirhat
10.5	Supply and fixing of connection bolts of variable diameter with nut and washer according to " ASTM A325 Type 1 or equivalent" with Fu =720 Mpa, including the cost of testing of bolts, all complete as per drawing, specification and direction of Engineer In-Charge.	kg	358.00	358.00	358.00	358.00
10.6	Supply and fixing of connection bolts of variable diameter with nut and washer according to " ASTM A307 Type A or equivalent" with Fu =414 Mpa, including the cost of testing of bolts, all complete as per drawing, specification and direction of Engineer In-Charge.	kg	321.00	321.00	321.00	321.00
10.7	Supply and installation of GI purlin & girt of any size conforming to "ASTM A653" grade 45, with a minimum yield strength of 310 MPa, including the cost of testing of materials, all complete as per drawing, specification and direction of Engineer-in-charge.	kg	167.00	166.00	167.00	167.00
10.8	Supply and fixing of sag rod conforming to grade 40, with a minimum yield strength of 275 MPa, including the cost of making threads, nuts and washers, red oxide primer etc. all complete as per drawing, specification and direction of Engineer-in-charge.	kg	167.00	167.00	167.00	167.00
10.9	Supply and fixing of cable/wire bracing conforming to "ASTM A475" with a minimum yield strength of 119.3 MPa, with I-bolt and hill side washer, all complete as per drawing, specification and direction of Engineer-in-charge.	meter	231.00	231.00	231.00	231.00
10.10	Supplying and fixing of shear stud of variable dia conforming to ASTM A108 or equivalent with minimum yield strength of 275 MPa, including the cost testing, welding etc. all complete as per drawing, specification and direction of Engineer-in-charge.	kg	169.00	169.00	169.00	169.00

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Item No.	Description of Item	Unit	Unit Rate of Railway Division In Taka			
			Dhaka	Chattogram	Paksey	Lalmonirhat
10.11	Supply and installation of 0.70 mm thick galvanized decking panel according to ASTM A653, with minimum yield strength of 345 MPa, including all necessary accessories (sheeting screws with washers, sealants etc.), testing of materials etc. all complete as per drawing, specification and direction of Engineer-in-charge.	kg	191.00	191.00	191.00	191.00
10.12	Supply and installation of 0.47 mm thick zinc alum color coated profile sheet for roof, wall, capping, flashing, trimming, gutter etc. conforming to ASTM A792, Grade: 80, AZ150 gm/m ² , including the cost of necessary accessories (sheeting screws with washers, silicon sealant etc.), testing of materials etc. all complete as per drawing specification and direction of Engineer-in-charge.	kg	237.00	237.00	237.00	237.00
10.13	Supply and installation of 0.457 mm thick corrugated galvanized iron sheet (Bangladesh made) having min weight 63-65 kg per bundle (2'-6" width, 70 – 72 rft long) fitted and fixed on M.S. sections with 'J' hook or wooden purlin with screws, limpet washers and putty etc. all complete and accepted by the Engineer-in-charge.	sqm	762.00	756.00	757.00	757.00
10.14	Supply and installation of 2.0 mm thick fiber glass sheet (transparent sheet) for roof, wall etc. on M.S. purlin, angle etc. with 'J' hook or screws with washer and putty, all complete as per drawing, specification and direction of Engineer-in-charge.	sqm	1437.00	1436.00	1428.00	1428.00
10.15	Supply and installation of double bubble foil insulation at wall and roof of nominal thickness of 8 mm conforming to Class A in accordance with the ASTM-E84-09 fire test standard, including the cost of lapping, costape, adhesive and necessary accessories, all complete as per drawing, specification and direction of Engineer-in-charge.	sqm	345.00	345.00	345.00	345.00

Item No.	Description of Item	Unit	Unit Rate of Railway Division In Taka			
			Dhaka	Chattogram	Paksey	Lalmonirhat
10.16	Premium Synthetic Enamel paint of approved best quality and colour delivered from authorized local agent of the manufacturer(Berger robbialac supergloss synthetic enamel/Elite lucky seven/Asian apcolipe premium paint or equivalent brand) in a sealed container, having highly water resistant, high bondibility, flexibility property; using specified brand thinner applying to metallic surface by spray in two coats over single coat anti-corrosive coating including cleaning drying, making free from dirt, grease, wax, removing all chalked and scaled materials, all complete in all floors accepted by the Engineer-in-charge. (payment shall be made on structural steel weight basis)	kg	10.00	10.00	10.00	10.00
10.17	Supply and application of corrosion protection paint to the surface of the structural steel members conforming to SA 2.5; Steel members to be shot blasted inside the enclosed shot blasting chamber, final coat paint must be applied on site after installation, including the cost of primer, testing and necessary accessories, all complete as per drawing, specification and direction of Engineer-in-charge.	kg	27.00	27.00	27.00	27.00
10.18	Supply and pouring of non-shrink grout to steel column bases conforming to ASTM C 109 having compressive strength not less than 45 MPa, including the cost of shutter and necessary accessories, all complete as per drawing, specification and direction of Engineer-in-charge.	cum	147957.00	147957.00	147957.00	147957.00
10.19	0.27 mm thick galvanized iron plain sheet ridging with 300 mm lap on either side fitted and fixed with galvanized bolts and nuts etc. all complete and accepted by the Engineer-in-charge.					
10.19.1	Galvanized	meter	472.00	471.00	459.00	459.00
10.19.2	Colored	meter	523.00	522.00	510.00	510.00
10.20	1.5 mm thick plain fiberglass sheet ridging with 300 mm lap on either side fitted and fixed with galvanized bolts and nuts etc. all complete and accepted by the Engineer-in-charge.	meter	875.00	874.00	862.00	862.00









Item No.	Description of Item	Unit	Unit Rate of Railway Division In Taka			
			Dhaka	Chattogram	Paksey	Lalmonirhat
10.21	Safety Canopy: Supplying temporary safety canopy around construction work place where public safety is likely to be endangered due to construction activities; which shall be made of truss system of steel sections (main frame) at 1800 mm c/c with purlins @ 750 mm c/c, making flooring system by corrugated galvanized iron sheets of thickness 0.45 mm, laying wire mesh net on iron sheets, providing continuous gutter along the edges of the building with downpipe @ 6000 mm c/c, including fitting and fixing in position providing necessary anchors, cables, wires, ties etc. by standard anchoring and welding, nut-bolts etc, all complete and accepted by the Engineer-in-charge	sqm	2366.00	2358.00	2359.00	2359.00
10.22	Safety net: Supplying temporary safety net (hessian cloth) around construction work place (along the height of the building) where public safety is likely to be endangered due to construction activities; which shall be supported using scaffolding around the building for brick work/plaster; including fitting and fixing in position providing necessary anchors, wires, ties etc. all complete and accepted by the Engineer-in-charge. (Rate is excluding the cost of scaffolding)	sqm	51.00	51.00	50.00	50.00

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Item No.	Description of Item	Unit	Unit Rate of Railway Division In Taka			
			Dhaka	Chattogram	Paksey	Lalmonirhat
CHAPTER 11 : WOOD WORKS IN DOOR AND WINDOW FRAME, ROOF TRUSS AND RAILINGS						
Item No.	Description of Item	Unit	Unit Rate of Railway Division In Taka			
			Dhaka	Chattogram	Paksey	Lalmonirhat
11.1	Supplying and making door and window frames (Chowkat) for all floors with matured seasoned wood of required size. Painting two coats of coal tar to the surface in contact with wall. Fitting and fixing in position etc. all complete and accepted by the Engineer-in-charge. (All sizes of wood are finished).					
11.1.1	Mehgoni	cum	142607.00	142030.00	139314.00	139314.00
11.1.2	Garjan/ Jam/ Local sal	cum	152718.00	147085.00	151952.00	151952.00
11.1.3	Silkarai	cum	167884.00	167307.00	164591.00	164591.00
11.1.4	Teak Chambal /Jarul	cum	228550.00	222917.00	227784.00	227784.00
11.1.5	Chittagong Teak	cum	263938.00	258305.00	270705.00	270705.00
11.1.6	Burma Teak	cum	400435.00	394802.00	402198.00	402198.00
11.2	Supplying, fitting and fixing M.S. flat bar clamp of 225 mm x 38 mm x 6 mm size having bifurcated ends to door and window frames with necessary screws including cutting grooves in chowkat if necessary and encasing inside the wall with cement concrete (1:2:4) etc, all complete and accepted by the Engineer-in-charge.	each	127.00	127.00	122.00	122.00
11.3	Supplying, fitting and fixing M.S. flat bar clamp of 150 mm x 38 mm x 6 mm size having bifurcated ends to door and window frames with necessary rowel plug, screws etc. including cutting grooves in chowkat if necessary etc. all complete and accepted by the Engineer-in-charge.	each	131.00	130.00	126.00	126.00
11.4	Supplying, fitting and fixing double leaf door frame for all floors made with 38mm x 38 mm x 6 mm M.S. angle fitted with 150 mm long 6 nos. iron clamps of same size M.S. angle (with one end bifurcated) with the vertical members of the frame, fixing the frame in wall with cement concrete (1:2:4), mending good the damages, fixing 6 Nos. of 100 mm long iron hinges with the vertical members of the frame all complete including making holes in walls, cutting, sizing, welding, fabricating, carrying from work-shop to site and local carriage, curing etc. all complete as per plan and drawing and accepted by the Engineer-in-charge.	meter	778.00	777.00	768.00	768.00

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Item No.	Description of Item	Unit	Unit Rate of Railway Division In Taka			
			Dhaka	Chattogram	Paksey	Lalmonirhat
11.5	Supplying, fitting and fixing single leaf door frame for all floors made with 38 mm x 38 mm x 6 mm M.S. angle, fixing 125 mm long 6 nos. iron clamps of same size (with one end bifurcated) with the vertical members of the frame, fixing the frame in wall with cement concrete (1:2:4), mending good the damages, fixing 4 nos. 100 mm size iron hinges with the vertical members of the frame, all complete including making holes in walls, cutting, sizing, welding, fabricating, carriage from workshop to site including local carriage, curing etc. as per plan and drawing etc. all complete and accepted by the Engineer-in-charge.	meter	758.00	758.00	747.00	747.00
11.6	Supplying matured seasoned wood and making roof truss of any size with wall plates as per design including supplying, fabricating and hoisting, scaffolding, fitting and fixing in position with bolts, nuts, painting two coats of coal tar etc. all complete and accepted by the Engineer-in-charge. (All sizes of wood are finished).					
11.6.1	Garjan / Jam/ Local Sal wood	cum	125547.00	120889.00	126617.00	126617.00
11.6.2	Mehgoni	cum	116447.00	116339.00	115243.00	115243.00
11.6.3	Silkarai /Chickrashi	cum	139197.00	139088.00	137992.00	137992.00
11.7	Supplying and making hand rail for stair case with matured seasoned wood including necessary moulding with proper corner, finishing as per design, fitting and fixing in position in all floors etc. all complete and accepted by the Engineer-in-charge.					
11.7.1	Mehgoni	cum	145450.00	145068.00	141152.00	141152.00
11.7.2	Local Sal	cum	154550.00	149618.00	152527.00	152527.00
11.7.3	Silkarai / Chikrashi	cum	168200.00	167818.00	163901.00	163901.00
11.7.4	Teak Chambal wood	cum	222799.00	217866.00	220775.00	220775.00
11.7.5	Chittagong oak wood	cum	254648.00	249716.00	259404.00	259404.00
11.7.6	Burma Teak wood	cum	377495.00	372564.00	377747.00	377747.00

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Item No.	Description of Item	Unit	Unit Rate of Railway Division In Taka			
			Dhaka	Chattogram	Paksey	Lalmonirhat
CHAPTER 12 : DOOR-WINDOW SHUTTER & FLY PROOF WIRE-NET SHUTTER						
Item No.	Description of Item	Unit	Unit Rate	Unit Rate	Unit Rate	Unit Rate
12.1	Supplying, fitting and fixing 38 mm thick well matured seasoned (min. 250 mm wide plank) solid wood single leaf door shutter having top rail style of sections 100mm x 38mm, lock rail 125 mm x 38 mm and bottom rail 225 mm x 38 mm. Closed joints with 25 mm x 12 mm size wooden peg and provided with best quality 4 Nos. 100mm iron hinges 2 (two) Nos. best quality 12 mm dia 250 mm and 200 mm long iron tower and socket bolts, 2 (two) Nos. heavy type nickel plated handle, 1(one) No best quality hasp bolt, hinged cleats, buffer blocks and finished by sand papering etc. all complete in all floors and accepted by the Engineer-in-charge. (All sizes of wood are finished)					
12.1.1	Kathal	sqm	8689.00	8657.00	8431.00	8431.00
12.1.2	Gamari	sqm	7671.00	7435.00	7617.00	7617.00
12.1.3	Teak Chambal	sqm	11335.00	11100.00	11179.00	11179.00
12.1.4	Chittagong Teak	sqm	12761.00	12525.00	12908.00	12908.00
12.1.5	Chapalish	sqm	8485.00	8249.00	8431.00	8431.00
12.1.6	Burma Teak	sqm	18258.00	18022.00	18203.00	
12.2	Supplying, fitting and fixing 38 mm thick well matured seasoned (min. 250 mm wide plank) solid wood single leaf flush door shutter having a frame of top, lock and bottom rail of sections 100 mm x 12 mm styles 100 mm x 38 mm covered with 100 mm x 12 mm plank, screwed to each face and provided with best quality 4 Nos. 100 mm iron hinges, 2 (two) Nos. best quality 12 mm dia 250 mm and 200mm long iron tower and socket bolts, 1 (one) No best quality hasp bolt, 2 (two) Nos. heavy type nickel plated handles, hinged cleats, buffer blocks and finished by sand papering etc. all complete in all floors and accepted by the Engineer-in-charge. (All sizes of wood are finished)					
12.2.1	Kathal	sqm	7344.00	7318.00	7150.00	7150.00
12.2.2	Gamari	sqm	6438.00	6231.00	6426.00	6426.00
12.2.3	Teak Chambal	sqm	9698.00	9491.00	9595.00	9595.00
12.2.4	Chittagong Teak	sqm	10966.00	10759.00	11133.00	11133.00
12.2.5	Chapalish	sqm	7163.00	6956.00	7150.00	7150.00
12.2.6	Burma Teak	sqm	7163.00	6956.00	7150.00	7150.00

Item No.	Description of Item	Unit	Unit Rate of Railway Division In Taka			
			Dhaka	Chattogram	Paksey	Lalmonirhat
12.3	Supplying, fitting and fixing 38 mm thick finished well matured seasoned (min. 250 mm wide plank) wooden ornamental special design (equivalent hatil) (both sides) single panel flush door shutter with top and middle rail 150 mm x 38 mm bottom rail 225 mm x 38 mm and style 125 mm x 38 mm, having vertical panels 175 mm x 38 mm in./c minimum 12 mm lap to each panel providing 4 nos, best quality 100 mm long brass hinges, 12 mm dia best quality 200 mm & 250 mm long brass socket and tower bolts, 1 (one) No best quality hasp bolt, 2 (two) nos heavy type best quality brass handle, hinges cleats, buffer blocks including supply of necessary nails and screws, making design by machine, finished etc. all complete in all floors and accepted by the Engineer-in-charge (Chittagong teak wood). (All sizes of wood are finished)	sqm	16788.00	16504.00	16847.00	16847.00
12.4	Supplying, fitting and fixing 38 mm thick well matured seasoned (min. 250 mm wide plank) wooden double leaf panel door shutters . Top rail and styles of sections 100 mm x 38 mm, lock rail 125 mm x 38 mm and bottom rail 225 mm x 38 mm, paneling 38 mm thick both sides raised, provided with best quality 8 Nos. 100 mm long iron hinges, 2 (two) Nos. best quality 12 mm dia 250 mm and 200 mm long iron tower and socket bolts, 2 (two) Nos. heavy type nickel plated handle, 1 No. hasp-bolt, hinged cleats, buffer blocks and finished by sand papering, necessary screws etc. all complete in all floors and accepted by the Engineer-in-charge. (All sizes of wood are finished)					
12.4.1	Kathal	sqm	10382.00	10338.00	10081.00	10081.00
12.4.2	Gamari	sqm	9110.00	8812.00	9064.00	9064.00
12.4.3	Teak Chambal	sqm	13688.00	13390.00	13515.00	13515.00
12.4.4	Chittagong Teak	sqm	15468.00	15170.00	15674.00	15674.00
12.4.5	Chapalish	sqm	10127.00	9829.00	10081.00	10081.00
12.4.6	Burma Teak	sqm	22335.00	22037.00	22289.00	22289.00

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Item No.	Description of Item	Unit	Unit Rate of Railway Division In Taka			
			Dhaka	Chattogram	Paksey	Lalmonirhat
12.5	Supplying, fitting and fixing 38 mm thick well matured seasoned (min. 250 mm wide plank) wooden double leaf panel door shutters . Top rail and styles of sections 100 mm x 38 mm. lock rail 125 mm x 38 mm and bottom rail 225 mm x 38 mm. paneling 25 mm thick one side raised, provided with best quality 6 nos. 100mm long iron hinges, 2 (two) Nos. best quality 12 mm dia 250 mm and 200 mm long iron tower and socket bolts, 1 (one) No best quality hasp bolt, 2 (two) Nos. heavy type nickel plated handles, 1 (one) No best quality hasp bolt, hinged cleats, buffer blocks and finished by sand papering, necessary screws etc. all complete in all floors and accepted by the Engineer-in-charge. (All sizes of wood are finished)					
12.5.1	Kathal	sqm	9031.00	8995.00	8771.00	8771.00
12.5.2	Gamari	sqm	7947.00	7694.00	7904.00	7904.00
12.5.3	Teak Chambal	sqm	11849.00	11597.00	11698.00	11698.00
12.5.4	Chittagong Teak	sqm	13366.00	13114.00	13538.00	13538.00
12.5.5	Chapalish	sqm	8814.00	8561.00	8771.00	8771.00
12.5.6	Burma Teak	sqm	19220.00	18968.00	19177.00	19177.00
12.6	Supplying, fitting and fixing 38 mm thick finished well matured seasoned (min. 250 mm wide plank) wooden grooved single panel flush door shutters with top and middle rail 100 mm x 38 mm, bottom rail 225 mm x 38 mm and style 100 mm x 38 mm, having vertical panels 100 mm x 38 mm including keeping 6 mm x 12 mm even groove all around and minimum 12 mm grooved lap to each panel. Providing 4 Nos. best quality 100 mm long iron hinges, 12 mm dia best quality 200 mm and 250 mm long iron socket and tower bolts, 2 (two) Nos. heavy type best quality nickel plated handle, 1 (one) No best quality hasp bolt, hinged cleats, wooden buffer blocks including supply of necessary nails and screws, finished by sand papering etc. complete in all floors as per drawing and accepted by the Engineer-in-charge. (All sizes of wood are finished).					
12.6.1	Kathal	sqm	10099.00	10057.00	9793.00	9793.00
12.6.2	Gamari	sqm	8898.00	8616.00	8832.00	8832.00
12.6.3	Chittagong Teak	sqm	14902.00	14620.00	15074.00	15074.00
12.6.4	Chapalish	sqm	9858.00	9576.00	9793.00	9793.00
12.6.5	Burma Teak	sqm	21387.00	21105.00	21322.00	21322.00

Item No.	Description of Item	Unit	Unit Rate of Railway Division In Taka			
			Dhaka	Chattogram	Paksey	Lalmonirhat
12.7	Supplying, fitting and fixing 36 mm thick and having density 400 kg/cum solid particle board single leaf flush door for all floors for internal use made of well matured mechanical seasoned Rubber (Malaysian timber) or other approved wooden frame having finished size 35 mm x 50 mm around upon which 1.2 mm thick veneer (total two Nos. of veneers one of 0.7 mm horizontally made of garjan and another of 0.5 mm vertically made of Burma Teak or ChaMPa or Chapalish or Garjan wood) are pested on each side by mechanized process and provided with best quality 4 Nos. 100mm long iron hinges, 2 Nos. best quality 12 mm dia 250 mm and 200 mm long iron tower and socket bolts, 2 (two) Nos. heavy type nickel plated handles, hinged cleats, buffer blocks, necessary screws etc. all complete and accepted by the Engineer-in-charge					
12.7.1	Burma Teak veneered	sqm	5233.00	5230.00	5209.00	5209.00
12.7.2	Champ veneered	sqm	3912.00	3909.00	3888.00	3888.00
12.7.3	Chapalish veneered	sqm	3912.00	3909.00	3888.00	3888.00
12.7.4	Garjan veneered	sqm	4071.00	4067.00	4046.00	4046.00
12.8	Manufacturing and supplying, fitting, fixing well matured seasoned (minimum 250 mm wide plank) wooden fixed louver shutters having 62 mm x 125 mm frame and inner horizontal wooden louver 150 mm x 25 mm size spaced @ 50 mm c/c fixed with frame in grooves including cost of screws, nails, 12 mm x 12 mm size wooden bit, preparing the surface by sand papering etc. all complete as per drawing and accepted by the Engineer-in-charge. (All sizes of wood are finished).					
12.8.1	Gamari	sqm	10352.00	9895.00	10645.00	10645.00
12.8.2	Chittagong Teak	sqm	21396.00	20939.00	22126.00	22126.00
12.8.3	Chapalish	sqm	12119.00	11662.00	12412.00	12412.00
12.8.4	Burma Teak	sqm	33323.00	32866.00	33616.00	33616.00

Item No.	Description of Item	Unit	Unit Rate of Railway Division In Taka			
			Dhaka	Chattogram	Paksey	Lalmonirhat
12.9	Supplying, fitting and fixing well matured seasoned (minimum 250 mm wide plank) wooden glazed ventilator louver shutters for all floors having wooden outer frame of section 62 mm x 125 mm with 62 mm x 125 mm size vertical divider with inner 50 mm x 38 mm shutter and with 3 Nos. horizontal 38 mm x 38 mm sash bar in each part and inner horizontal glazed louver of size 150 mm x 6 mm fixed in frame @ 154 mm c/c by cutting grooves in the frame including cost of screws, wooden bit, pivots, sand papering, 5 mm thick glass, cutting glass to required size etc. all complete as per design, drawing and accepted by the Engineer-in-charge. (All sizes of wood are finished).					
12.9.1	Gamari	sqm	7253.00	6978.00	7389.00	7389.00
12.9.2	Teak Chambal	sqm	11931.00	11657.00	11938.00	11938.00
12.9.3	Chittagong Teak	sqm	13751.00	13476.00	14144.00	14144.00
12.9.4	Chapalish	sqm	8293.00	8018.00	8429.00	8429.00
12.9.5	Burma Teak	sqm	20768.00	20493.00	20904.00	20904.00
12.10	Supplying fitting and fixing 38 mm thick well matured seasoned (minimum 250 mm wide plank) wooden door shutters for all floors having styles and rails of section 150 mm x 38 mm and 5 mm glass panes fitted and fixed with wooden batten, putty and nails including supplying and fitting and fixing 50 mm dia best quality round door lock, 12 mm dia, 2 Nos. 250 mm long iron tower bolt and 8 Nos. 100 mm long iron hinges to each shutters, 2 Nos. nickel plated handle, 5mm thick glass, glass cutting, hinged cleats, buffer blocks, screws, finished with necessary sand papering and putty works etc. all complete and accepted by the Engineer-in-charge.					
12.10.1	Chittagong Teak	sqm	9396.00	9259.00	9398.00	9398.00
12.10.2	Silkarai	sqm	7222.00	7199.00	6996.00	6996.00
12.10.3	Burma Teak	sqm	12486.00	12349.00	12374.00	12374.00

Item No.	Description of Item	Unit	Unit Rate of Railway Division In Taka			
			Dhaka	Chattogram	Paksey	Lalmonirhat
12.11	Supplying, fitting and fixing 25 mm thick well matured seasoned (minimum 250 mm wide plank) Kathal wood door and window shutters for all floors having 75 mm x 25 mm 'Z' battens, provided with best quality 6 Nos. 100 mm long iron hinges, 2 Nos. 62 mm dia iron ring fitted with nuts, 2 Nos. best quality 12 mm dia, 300 mm and 200 mm long iron tower and socket bolts, hinged cleats, buffer blocks, screws and finished with sand papering in all floors etc. all complete and accepted by the Engineer-in-charge. (All sizes of wood are finished).	sqm	6730.00	6710.00	6566.00	6566.00
12.12	Supplying, fitting and fixing 38 mm thick well matured seasoned (minimum 250 mm wide plank) wood glazed window shutters for all floors having horizontal and vertical sections of 87 mm x 38 mm and sash bar 38 mm x 38 mm fitted with 3 mm glass panes with putty and nails and provided with best quality 4 Nos. 75 mm long iron hinges, 2 (two) Nos. best quality 12 mm dia 250 mm and 150 mm long iron tower and socket bolts, 01 no. nickel plated handles, 02 nos. 225 mm long catch hooks or hinged cleats, buffer blocks, necessary screws and finished with sand papering in all floors etc. all complete and accepted by the Engineer-in-charge. (All sizes of wood are finished).					
12.12.1	Kathal	sqm	6987.00	6963.00	6781.00	6781.00
12.12.2	Gamari	sqm	6235.00	6060.00	6179.00	6179.00
12.12.3	Teak Chambal	sqm	8944.00	8770.00	8813.00	8813.00
12.12.4	Chittagong Teak	sqm	9998.00	9823.00	10091.00	10091.00
12.12.5	Chapalish	sqm	6837.00	6662.00	6781.00	6781.00
12.12.6	Burma Teak	sqm	14062.00	13887.00	14006.00	14006.00

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Item No.	Description of Item	Unit	Unit Rate of Railway Division In Taka			
			Dhaka	Chattogram	Paksey	Lalmonirhat
12.13	Supplying, fitting and fixing 38 mm thick well matured seasoned (minimum 250 mm wide plank) wooden window shutter one third glazed and two third raised paneling on both sides for all floors having horizontal and vertical sections of 87 mm x 38 mm and sash bars 38 mm x 38 mm fitted with 3 mm glass panes with putty and nails and provided with best quality 4 Nos. 75 mm long iron hinges. 2 (two) Nos. best quality 12 mm dia 250 mm and 150 mm long iron tower and socket bolts, nickel plated handles, 3 mm glass, 02 nos. 225 mm long catch hooks, or hinged cleats, buffer blocks and finished by sand papering in all floors etc. all complete and accepted by the Engineer-in-charge. (All sizes of wood are finished).					
12.13.1	Kathal	sqm	9805.00	9779.00	9585.00	9585.00
12.13.2	Gamari	sqm	8453.00	8158.00	8504.00	8504.00
12.13.3	Teak Chambal	sqm	13317.00	13021.00	13233.00	13233.00
12.13.4	Chittagong Teak	sqm	15209.00	14913.00	15527.00	15527.00
12.13.5	Chapalish	sqm	9534.00	9238.00	9585.00	9585.00
12.13.6	Burma Teak	sqm	22505.00	22209.00	22555.00	22555.00
12.14	Seasoning of timber in a recognized mechanical timber seasoning plant up to 12% - 16% moisture content by weight as measured by an electric moisture meter or any other moisture measuring device etc. all complete including loading, unloading; carriage at both ends and accepted by the Engineer-in-charge.	cum	11917.00	11830.00	11483.00	11483.00
12.15.1	Supplying, fitting and fixing steel glazed window shutter for all floors with frames as per design having 25 mm x 25 mm x 5 mm angle section for Chowkat and shutters and 50 mm x 25 mm x 5 mm T- section used for vertical member and 25 mm x 5 mm F.I. bar for making box (combining with angle) and 25 mm x 19 mm x 5 mm T-section used for glass divider etc. including all charges for welding, riveting etc. including cost of supplying all essential fittings like iron hinges, plate handle, pin-stopper, adjustable cleat and clamps including supplying, fitting, fixing 3 mm glass panes by pucca putty, for fitting and fixing the frame, making necessary holes in brick walls and R.C.C works and fitting with C.C. (1:2:4) and mending good the damages including all cost of carriage, workshop charges, electricity, and labour for fittings, fixing, curing etc. all complete and accepted by the Engineer-in-charge. (Rate is excluding the costs of painting).	sqm	6800.00	6804.00	6795.00	6795.00

Item No.	Description of Item	Unit	Unit Rate of Railway Division In Taka			
			Dhaka	Chattogram	Paksey	Lalmonirhat
12.15.2	Supplying, fitting and fixing M.S. door shutter made with 38 mm x 38 mm x 6 mm angle outer frame, inner member 25 mm x 6 mm F.I. bar, cladding with 16 BWG M.S. sheet, 04 nos. 75 mm long hinge, 02 nos. locking arrangement with 50 mm x 50 mm x 6 mm M.S. angle chowkat including all charges for welding, riveting etc. including cost of supplying all essential fittings like iron hinges, socket bolts, clamps, for fitting and fixing the frame, making necessary holes in brick walls and R.C.C works and fitting with C.C. (1:2:4) and mending good the damages including all cost of carriage, workshop charges, electricity, and labour for fittings, fixing, curing etc. all complete and accepted by the Engineer-in-charge. (Rate is excluding the costs of painting).	sqm	7635.00	7601.00	7384.00	7384.00
12.16	Supplying, fitting and fixing steel glazed window shutter for all floors with frames as per design having 19mm x 19mm x 19mm x 3mm Z-section in frame and 19mm x 3mm F.I. bar for making T-section for horizontal dividers of shutters and 25mm x 3mm F.I. bar for middle vertical members of frame including all cost of charges for fabrication and manufacture by welding, riveting etc. Supplying all essential fittings like 2 nos. stopper handle, 300mm long 3 or 2 nos. adjustable iron cleats, 6 or 4 nos. 50mm long iron pin hinges, 150mm long 4 nos. clamps including supplying, fitting, fixing 3mm glass panes by pucca putty, for fitting and fixing frame making necessary holes in brick and R.C.C. wall or member as necessary filling with C.C. (1:2:4) and mending good the damages including all cost of carriage, electricity, workshop charges and labour for fitting, fixing etc. all complete as per drawing and design and accepted by the Engineer-in-charge. (Rate is excluding the costs of painting)					
12.16.1	With provision for fan-light by providing necessary additional materials, 03 nos adjustable 300 mm long iron cleats and 6 nos. 50 mm long iron pin hinges (total wt of grill without glass panes is min 28.13 kg for 15 sft)	sqm	4430.00	4434.00	4425.00	4425.00
12.16.2	Without provision for fan-light by providing 02 nos adjustable 300 mm long iron cleats and 4 nos. 50 mm long iron pin hinges (total wt of grill without glass panes is min 24.84 kg for 15 sft)	sqm	4141.00	4145.00	4136.00	4136.00

Item No.	Description of Item	Unit	Unit Rate of Railway Division In Taka			
			Dhaka	Chattogram	Paksey	Lalmonirhat
12.17	Manufacturing, supplying fitting and fixing of fixed glazed frame for all floors with outer member of 19mm x 19mm x 19mm x 3mm Z-section and vertical and horizontal dividers of 19mm x 19mm x 3mm T-section including all cost of fabrication and welding, supplying and fixing of 19mm x 19mm x 3mm angle clamps of 150mm long (with one end bifurcated) of required Nos. with the frame, fixing the frame in wall with (1:2:4) cement concrete in the hole for clamp after making necessary grooves, supplying and fixing of 3mm glass panes with pucca putty, mending good all damages, painting iron face with two coats of synthetic enamel paint over a coat of anti-corrosive priming of approved colour and quality etc. cost of electricity, workshop charges, carriage etc. all complete as per drawing and accepted by the Engineer-in-charge. [Rate is excluding the cost of painting] (Scope of work of this item is in staircase and over partition wall etc.)	sqm	4088.00	4094.00	4083.00	4083.00
12.18	Supplying, fitting and fixing 25 mm thick wooden double leaf fly proof wire mesh window shutter for all floors with 75 mm x 25 mm vertical and horizontal style and sash bar of 38 mm x 25 mm section provided with 24 B.W.G. G.I wire mesh netting of 20 mm mesh fitted and fixed with shutter by 12 mm x 12 mm wooden bit, brass screws, nails etc. including supply of all necessary fittings such as 2 Nos. 150 mm long brass tower and socket bolt of best quality 4 Nos. 75mm long brass hinges, heavy type 2 Nos. 150 mm long catch hook and 2 Nos. 100 mm long brass handle including fitting and fixing the same in position with frame with supply of necessary screws and nails etc. complete and accepted by the Engineer-in-charge. (All sizes of wood are finished)					
12.18.1	Kathal	sqm	5915.00	5898.00	5766.00	5766.00
12.18.2	Teak Chambal	sqm	7169.00	7056.00	7069.00	7069.00
12.18.3	Chittagong Teak	sqm	7844.00	7731.00	7888.00	7888.00
12.18.4	Burma Teak	sqm	10449.00	10336.00	10397.00	10397.00
12.19	Supplying, fitting and fixing of well matured seasoned wooden louver shutter (Chittagong Teak) having 75.50 mm x 38 mm size all around frame and inner horizontal wooden louver blade 65 mm x 20 mm spaced @ 38 mm c/c, fixed with frame in grooves including cost of nails, handle, tower bolt, screws (brass fitting) etc. all complete as per drawing and accepted by the Engineer-in-charge.	sqm	16122.00	15830.00	16366.00	16366.00

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Item No.	Description of Item	Unit	Unit Rate of Railway Division In Taka			
			Dhaka	Chattogram	Paksey	Lalmonirhat
12.20	Supplying, fitting and fixing 75 mm X 19 mm well matured seasoned Chittagong Teak wood moulding bit as per design etc. all complete approved and accepted by the Engineer-in-charge.	meter	1604.00	1585.00	1526.00	1526.00
12.21	Extra cost for using brass/ SS fittings in place of iron fittings in doors & windows for all floors (super quality local).					
12.21.1	Brass fittings of door	sqm	637.00	637.00	637.00	637.00
12.21.2	SS fittings of door	sqm	323.00	323.00	323.00	323.00
12.21.3	Brass fittings of windows	sqm	914.00	914.00	914.00	914.00
12.21.4	SS fittings of windows	sqm	508.00	508.00	508.00	508.00
12.22	Supplying, fitting and fixing hydraulic door closer (big size) of approved quality including all necessary tools and accessories etc. all complete and accepted by the Engineer-in-charge.	each	2564.00	2564.00	2556.00	2556.00
12.23.1	Supplying, fitting and fixing mortice door lock of approved quality including all necessary tools and accessories etc. all complete approved and accepted by the Engineer-in-charge.	each	1242.00	1239.00	1212.00	1212.00
12.23.2	Supplying, fitting and fixing rim/round door lock of approved quality including all necessary tools and accessories etc. all complete and accepted by the Engineer-in-charge.	each	1058.00	1055.00	1028.00	1028.00
12.24	Supplying, fitting and fixing of best quality magnetic door shock absorber of approved quality including all necessary tools and accessories etc. all complete and accepted by the Engineer-in-charge.	each	506.00	503.00	475.00	475.00
12.25	Supplying, fitting and fixing best quality heavy type 19 mm dia and 300 mm long brass hasp bolt including cutting grooves in door shutter and frames, screws etc. all complete approved and accepted by the Engineer-in-charge.	each	552.00	552.00	546.00	546.00
12.26	Supplying, fitting and fixing approved best quality foreign made stainless steel/brass door viewer/eye viewer from 12 mm to 20 mm diameter with adjustable thickness suitable for fitting from 37 mm to 50 mm thick door shutter in/c all necessary work as per direction and accepted by the Engineer in-charge.	each	689.00	686.00	659.00	659.00

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Item No.	Description of Item	Unit	Unit Rate of Railway Division In Taka			
			Dhaka	Chattogram	Paksey	Lalmonirhat

CHAPTER 13 : WINDOW GRILL, VERANDAH GRILL & NETTING

Item No.	Description of Item	Unit	Unit Rate of Railway Division In Taka			
			Dhaka	Chattogram	Paksey	Lalmonirhat
13.1	Supplying, fitting and fixing window grills made of 16 mm dia M.S. rod @ 100 mm c/c fitted with 3 (three) nos. horizontal M.S. flat bar (38 mm x 6 mm) including fabrication, welding, riveting, cost of electricity, workshop charges, carriage, fixing with pre-placed clamps in wall/RCC member for all floors etc. complete and accepted by the Engineer-in-charge. (Total weight per sqm should be approx. 22.8 kg and add or deduct @ Tk. 97.00 for each kg/sqm excess or less respectively)	sqm	2941.00	2937.00	2913.00	2913.00
13.2	Supplying, fitting and fixing window grills of any design made of 20 mm x 3 mm mild steel section with outer frame of 25 mm x 6 mm F.I. bar including fabricating, welding, cost of electricity, workshop charges, carriage, fixing with pre-placed clamps in walls or RCC member, all necessary tools and plants etc complete for all floors and accepted by the Engineer-in-charge. (Total weight per sqm should be approx 11.0 kg. and add or deduct @ Tk. 146.00 for each kg/sqm excess or less respectively)	sqm	2002.00	1999.00	1969.00	1969.00
13.3	Supplying, fitting and fixing window grills of any design made with 20 mm x 5 mm F.I. bar as inner and outer section; including fabricating, welding, cost of electricity and tools and plants etc. complete for all floors accepted by the Engineer-in-charge. (Total weight per sqm should be min 12 kg. and add or deduct. @ Tk. 143.00 for each kg/sqm excess or less respectively)	sqm	2143.00	2140.00	2110.00	2110.00
13.3.1	Supplying, fitting and fixing window grills of any design made with 20 mm x 5 mm F.I. bar as inner members but no outer frame; including fabricating, welding, cost of electricity and tools and plants etc. complete for all floors accepted by the Engineer-in-charge. (Total weight per sqm should be approx 10 kg. and add or deduct. @ Tk. 160.00 for each kg/sqm excess or less respectively)	sqm	1984.00	1980.00	1951.00	1951.00

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Item No.	Description of Item	Unit	Unit Rate of Railway Division In Taka			
			Dhaka	Chattogram	Paksey	Lalmonirhat
13.4.1	Supplying, fitting, fixing window grills of any design made with 25 mm x 6 mm F.I. bar as both outer and inner section ; including fabrication, welding, cost of electricity workshop charges, carriage, cutting grooves, mending good the damages, tools and plants etc. complete for all floors accepted by the Engineer-in-charge. (Total weight per sqm should be approx 21 kg. and add or deduct @ Tk. 111.00 for each kg/sqm excess or less respectively)	sqm	2939.00	2935.00	2906.00	2906.00
13.4.1.1	Supplying, fitting, fixing window grills of any design made with 25 mm x 6 mm F.I. bar as inner section but no outer frame ; including fabrication, welding, cost of electricity workshop charges, carriage, cutting grooves, mending good the damages, tools and plants etc. complete for all floors accepted by the Engineer-in-charge. (Total weight per sqm should be approx 18 kg. and add or deduct @ Tk. 118.00 for each kg/sqm excess or less respectively)	sqm	2657.00	2653.00	2623.00	2623.00
13.4.2	Supplying, fitting and fixing window grill made of M.S. section 25 mm x 6mm outer frame and 20 mm x 5 mm inner member as per drawing and design approved and accepted by the Engineer-in-charge. (Total weight per sqm should be min 14 kg. and add or deduct @ Tk. 130.00 for each kg/sqm excess or less respectively)	sqm	2282.00	2278.00	2248.00	2248.00
13.5.1	Supplying, fitting and fixing window grill made of 12 mm x 12 mm M.S. solid bar 140 mm c/c with outer frame of 38 mm x 6mm F.I. bar as per design approved and accepted by the Engineer-in-charge.	sqm	3084.00	3081.00	3033.00	3033.00
13.5.2	Supplying, fitting and fixing window grill made of 10 mm x 10 mm M.S. solid bar 140mm c/c with outer frame of 38 mm x 6mm F.I. bar as per design approved and accepted by the Engineer-in-charge.	sqm	3133.00	3129.00	3082.00	3082.00

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Item No.	Description of Item	Unit	Unit Rate of Railway Division In Taka			
			Dhaka	Chattogram	Paksey	Lalmonirhat
13.5.3	Supply, fitting and fixing window grill made of 12 mm x 12 mm hollow M.S. box made of minimum 16 BG M.S. sheet @ 100mm c/c with outer frame of 38 mm x 6 mm F.I. bar as per drawing approved and accepted by the Engineer-in-charge.	sqm	2523.00	2520.00	2472.00	2472.00
13.6	Supplying, fitting and fixing window grills made of mild steel section of 25 mm x 3 mm including fabrication, welding, cost of electricity, workshop charges, carriage, fixing with pre-placed clamps in walls or RCC member, all necessary tools and plants etc complete for all floors and accepted by the Engineer-in-charge. (Total weight per sqm should be min 8.0 kg. and add or deduct @ Tk. 220.00 for each kg/sqm excess or less respectively)	sqm	2153.00	2149.00	2116.00	2116.00
13.7	Supplying, fitting and fixing veranda grill made of 10 mm dia M.S. rods provided @ 100 mm c/c in any position both ways as per design with outside frame 25 mm x 25 mm x 6 mm M.S. angle including fabricating, welding in each point, painting 2 coats of synthetic enamel paint over a coat of anti corrosive priming, including cost of electricity, tools and plants, workshop charges, carriage of the same including cutting groves in the R.C.C. or brick work, mending good the damages with C.C. (1:2:4) etc. complete for all floors accepted by the Engineer-in-charge. [Rate is excluding the cost of painting] (Total weight per sqm should be min 16.80 kg. and add or deduct @ Tk. 124.00 for each kg/sqm excess or less respectively)	sqm	2755.00	2753.00	2729.00	2729.00

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Item No.	Description of Item	Unit	Unit Rate of Railway Division In Taka			
			Dhaka	Chattogram	Paksey	Lalmonirhat
13.8	Supplying, fitting and fixing verandah grill made of 10 mm dia M.S. rod provided @ 75 mm c/c in any position both ways as per design with outside frame of 25 mm x 25 mm x 6 mm M.S. angle including fabricating, welding in each point , painting 2 coats of synthetic enamel paint over a coat of anti-corrosive priming including cost of electricity, tools and plants, workshop charges, carriage of the same including cutting groves in the R.C.C. or brick work, mending good the damages with C.C. (1:2:4) etc, all complete for all floors accepted by the Engineer-in-charge. [Rate is excluding the cost of painting] (Total weight per sqm should be min 21.00 kg, and add or deduct @ Tk. 112.00 for each kg/sqm excess or less respectively)	sqm	3148.00	3146.00	3122.00	3122.00

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Item No.	Description of Item	Unit	Unit Rate of Railway Division In Taka			
			Dhaka	Chattogram	Paksey	Lalmonirhat
CHAPTER 14: ALUMINIUM DOOR, WINDOW FRAME & GLASS WORKS						
Item No.	Description of Item	Unit	Unit Rate of Railway Division In Taka			
			Dhaka	Chattogram	Paksey	Lalmonirhat
14.1	Supplying fitting and fixing of aluminium swing door with spandrel as per the U.S. Architectural Aluminium Manufacturer's Association (AAMA) standard specification and BDS 1879:2014 having 1.8 mm thick wall frame (size 101.60 mm, 44.45 mm, 83.21 mm), 2.33 mm thick shutter (size 54 mm, 46 mm), 0.99 mm thick door glass bit (size 16.54 mm, 14.49 mm, 0.115 kg/m), 2.5 mm thick clousure section (size 101.60 mm, 42.93 mm, 1.2 mm), 106.60 mm clousure cover (0.45 kg/m), 4 mm thick floor bottom (size 101.60 mm, 12.70 mm, 1 kg/m), 1.8 mm thick shutter bottom (size 82.6 mm, 43.99 mm, 0.60 kg/m), 1.8 mm thick shutter top (size 51 mm, 43.99 mm, 1.88 kg/m) and 2.3 mm to 4.01 mm thick handle (size 101.60 mm, 38.10 mm, 25.40 mm short, 1.35 kg/m) section of all aluminum members will be anodized to aluminium bronze/silver/ss/black colour with a coat not less than 15 micrones in thickness or powder coated to any colour with a coat not less than 25 micrones in thickness and density of 4 mg per square cm etc. including all accessories like swing door clousure, swing door lock, swing door mohiar, labour charge, fabrication, fitting fixing in position, carriage and electricity charge keeping provision for fitting 5 mm thick glass including neoprene sealant etc. complete in all respect as per drawing and accepted by the Engineer-in-charge. (Total weight min 23 kg/m ²)					
14.1.1	Anodized to s.s colour/ black colour	sqm	7897.00	7886.00	7826.00	7826.00
14.1.2	Anodized to bronze colour	sqm	7648.00	7642.00	7599.00	7599.00
14.1.3	Anodized to silver colour	sqm	7887.00	7876.00	7815.00	7815.00
14.1.4	Powder coated to any colour	sqm	7637.00	7631.00	7589.00	7589.00

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Item No.	Description of Item	Unit	Unit Rate of Railway Division In Taka			
			Dhaka	Chattogram	Paksey	Lalmonirhat
14.2	Supplying fitting and fixing of aluminium swing door as per the U.S. Architectural Aluminium Manufacturer's Association (AAMA) standard specification and BDS 1879:2014 having 1.8 mm thick wall frame (size 101.60 mm. 44.45 mm. 83.21 mm). 2.33 mm thick shutter (size 54 mm, 46 mm), 0.99 mm thick door glass bit (size 16.54 mm. 14.49 mm 0.115 kg/m), 2.5 mm thick clousure section (size 101.60 mm, 42.93 mm 1.2 mm), 106.60 mm clousure cover (0.45 kg/m), 4 mm thick floor bottom (size 101.60 mm. 12.70 mm 1 kg/m), 1.8 mm thick shutter bottom (size 82.6 mm, 43.99 mm, 0.60 kg/m), 1.8 mm thick shutter top (size 51 mm, 43.99 mm, 1.88 kg/m) and 2.3 mm to 4.01 mm thick handle (size 101.60 mm, 38.10 mm, 25.40 mm short, 1.35 kg/m) section of all aluminum members will be anodized to aluminium bronze/silver/ss/black colour with a coat not less than 15 micrones in thickness or powder coated to any colour with a coat not less than 25 micrones in thickness and density of 4 mg per square cm etc. including all accessories like swing door clousure, swing door lock, swing door mohiar, labour charge, fabrication, fitting fixing in position, carriage and electricity charge keeping provision for fitting 5 mm thick glass including neoprene sealant etc. complete in all respect as per drawing and accepted by the Engineer-in-charge. (Total weight min 23 kg/m ²)					
14.2.1	Anodized to s.s colour/ black colour	sqm	7452.00	7444.00	7391.00	7391.00
14.2.2	Anodized to bronze colour	sqm	7452.00	7444.00	7391.00	7391.00
14.2.3	Anodized to silver colour	sqm	7446.00	7438.00	7385.00	7385.00
14.2.4	Powder coated to any colour	sqm	7446.00	7438.00	7385.00	7385.00

 







Item No.	Description of Item	Unit	Unit Rate of Railway Division In Taka			
			Dhaka	Chattogram	Paksey	Lalmonirhat
14.3	Supplying, fitting and fixing of aluminium composite swing doors with fixed partition as per the U. S. Architectural Aluminium Manufacturer's Association (AAMA) standard specification and BDS 1879:2014 having 1.5 mm thick wall frame (size 101.60, 44.45 mm, 0.86 kg/m), 1.8 mm thick shutter side (size 54 mm, 46 mm, 1.2 kg/m), 1 mm thick door glass bit (size 16.54 mm, 14. 49 mm, 0.115 kg/m), 1.8 mm thick closure section (size 101.54 mm, 42.93 mm, 1.20 kg/m), 1.5 thick closure cover (101.60 mm, 0.45 kg/m), 4 mm thick floor bottom (size 101.60 mm, 12.70 mm, 1 kg/m), 1.8 mm thick shutter bottom (size 86.60 mm, 43.99 mm , 0.60 kg/m), 1.8 mm thick shutter top (size 51 mm, 43.99 mm, 1.88 kg/m) 2.3mm to 4.01mm thick handle (short) (size 101.60 mm, 38.10 mm, 25.40 mm, 1.35 kg/m), 1.5 mm thick top and side (size 101.60 mm, 44.45 mm, 1.3 kg/m), 1.50 mm thick bottom (size 101.35 mm, 44.45 mm, 1.10 kg/m), 1.50 mm thick bottom cover (44.32 mm, 19.61mm, 0.392 kg/m), 1.50 mm thick groove cover (size 83.21 mm, 16.00 mm, 0.57 kg/m), 0.99 mm thick fixed glass protector (size 39.09 mm, 14.81 mm, 0.188 kg/m), 0.99 mm thick fixed glass protector bit (size 15.75 mm, 14.81 mm, 0.13 kg/m) section of all aluminum members will be anodized to aluminium bronze/silver/ss/black colour with a coat not less than 15 micrones in thickness or powder coated to any colour with a coat not less than 25 micrones in thickness and density of 4 mg per square cm etc. (Total weight min 69.699 kg) keeping provision for 5 mm of glass panes with cost including all accessories like swing door clouser, swing door lock , swing door mohair, flush bolt , bolts and nuts including sealants, labour charge for fitting , fixing by angles, screws, mohiar, washer, machinery, cost of fabrication, making the grooves, mending good the damages, electricity etc. complete in all respect as per drawing and accepted by the Engineer-in-charge.					
14.3.1	Anodized to s.s colour/ black colour	sqm	3879.00	3875.00	3844.00	3844.00
14.3.2	Anodized to bronze colour	sqm	3879.00	3875.00	3844.00	3844.00
14.3.3	Anodized to silver colour	sqm	3879.00	3875.00	3844.00	3844.00
14.3.4	Powder coated to any colour	sqm	3879.00	3875.00	3844.00	3844.00

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Item No.	Description of Item	Unit	Unit Rate of Railway Division In Taka			
			Dhaka	Chattogram	Paksey	Lalmonirhat
14.4	Supplying, fitting and fixing of aluminium sliding doors as per the U.S. Architectural Aluminium Manufacturer's Association (AAMA) standard specification and BDS 1879:2014 having 1.2 mm thick outer bottom (size 75.50 mm, 17.79 mm, 0.528 kg/m), 1.2 mm thick outer top (size 75.50 mm, 26.80 mm, 0.78 kg/m) 1.2 mm thick shutter top (size 33 mm, 26.80 mm, 0.536 kg/m), 1.2 mm shutter bottom (size 60 mm, 24 mm, 0.736 kg/m), 1.2 mm thick outer side(size 75.50 mm, 19.90 mm, 0.616 kg/m) 1.5 mm thick shutter lock (size 49.20 mm, 26.20 mm, 0.661 kg/m), 1.2 mm thick inter lock (size 34.40 mm, 32.10 mm, 0.665 kg/m), 1.2 mm thick shutter divider (size 31.75 mm, 0.535 kg/m) sections all aluminum members(Total weight 14.789 kg) will be anodized to aluminium bronze/silver/ss/black colour with a coat not less than 15 micrones in thickness or powder coated to any colour with a coat not less than 25 micrones in thickness and density of 4 mg per square cm etc. including all accessories like handle, sliding door key lock , sliding door wheel, sliding door mohiar, sliding door neoprene, bolts and nuts including sealants, keeping provision for fitting 5mm thick glass including labour charge for fitting of accessories, making grooves and mending good damages, carriage, and electricity complete in all respect as per drawing and accepted by the Engineer-in-charge. Size up to: 2100 mm x 2100 mm					
14.4.1	Anodized to s.s colour/ black colour	sqm	3331.00	3327.00	3284.00	3284.00
14.4.2	Anodized to bronze colour	sqm	3281.00	3277.00	3234.00	3234.00
14.4.3	Anodized to silver colour	sqm	3331.00	3327.00	3284.00	3284.00
14.4.4	Powder coated to any colour	sqm	3331.00	3327.00	3284.00	3284.00

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Item No.	Description of Item	Unit	Unit Rate of Railway Division In Taka			
			Dhaka	Chattogram	Paksey	Lalmonirhat
14.5	Supplying, fitting and fixing of aluminium sliding doors as per the U.S. Architectural Aluminium Manufacturer's Association (AAMA) standard specification and BDS 1879:2014 having 1.2 mm thick outer bottom (size 75.50 mm, 17.79 mm, 0.528 kg/m), 1.2 mm thick outer top (size 75.50 mm, 26.80 mm 0.78 kg/m), 1.2 mm thick shutter top (size 33 mm, 26.80 mm, 0.536 kg/m), 1.2 mm thick shutter bottom (size 60 mm, 24 mm, 0.736 kg/m), 1.2 mm thick side (size 75.50 mm, 19.90 mm, 0.616 kg/m), 1.2 mm thick sliding fixed side (size 31 mm, 26 mm , 0.422 kg/m) 1.2 mm thick shutter lock (size 49.20 mm , 26. 20 mm , 0.661 kg/m), 1.2 mm thick inter lock (size 34.40 mm, 32.10 mm, 0.665 kg/m) 1.2 mm thick shutter divider (size 31.75 mm, 0.535 kg/m) and 1.4 mm to 1.5 mm thick spandrel (7.14 mm, 0.70 kg/m) sections all aluminium members (total weight 19.72 kg) will be anodized to aluminium bronze/silver/ss/black colour with a coat not less than 15 micrones in thickness or powder coated to any colour with a coat not less than 25 micrones in thickness and density of 4 mg per square cm etc. including all accessories like sliding door key lock, sliding door whee , sliding door mohiar, sliding door neoprene, bolts and nuts including sealants, keeping provision for fitting 5mm thick glass including labour charge for fitting of accessories, making grooves and mending good damages, carriage, and electricity complete in all respect as per drawing and accepted by the Engineer-in-charge. Size up to: 1800 mm x 2100 mm					
14.5.1	Anodized to s.s colour/ black colour	sqm	4492.00	4487.00	4437.00	4437.00
14.5.2	Anodized to bronze colour	sqm	4492.00	4487.00	4437.00	4437.00
14.5.3	Anodized to silver colour	sqm	4508.00	4503.00	4453.00	4453.00
14.5.4	Powder coated to any colour	sqm	4508.00	4503.00	4453.00	4453.00





Item No.	Description of Item	Unit	Unit Rate of Railway Division In Taka			
			Dhaka	Chattogram	Paksey	Lalmonirhat
14.6	Supplying, fitting and fixing of aluminium sliding window as per the U.S. Architectural Aluminium Manufacturer's Association (AAMA) standard specification and BDS 1879:2014 having 1.2 mm thick outer bottom (size 75.50 mm, 32mm), 1.2 mm thick outer top (size 75.50 mm, 16.80 mm), 1.2 mm thick shutter top (size 33 mm.26.80, 22 mm), 1.2 mm thick shutter bottom (size 60mm, 24.40 mm), 1.2 mm thick outer side (size 75.50 mm,19.90 mm), 1.2 mm thick shutter lock (size 49.20 mm 26.20 mm) and 1.2 mm thick inter lock (size 34.40 mm, 32.10 mm) sections all aluminium members (total weight kg/sqm) will be anodized to aluminium bronze/silver/ss/black colour with a coat not less than 15 micrones in thickness or powder coated to any colour with a coat not less than 25 micrones in thickness and density of 4 mg per square cm etc. including all accessories like sliding door key lock, sliding door wheel, sliding door mohiar, sliding door neoprene, bolts and nuts including sealants, keeping provision for fitting 5 mm thick glass inrones in thickness and density of 4 mg per square cm etc. including all accessories like sliding door key lock, sliding door whee , sliding door mohiar, sliding door neoprene, bolts and nuts incl					
14.6.1	Size up to: 1500 mm x 1400 mm. (total weight minimum 9.081 kg)					
14.6.1.1	Anodized to s.s colour/ black colour	sqm	4018.00	4011.00	3968.00	3968.00
14.6.1.2	Anodized to bronze colour	sqm	4042.00	4035.00	3992.00	3992.00
14.6.1.3	Anodized to silver colour	sqm	4042.00	4035.00	3992.00	3992.00
14.6.1.4	Powder coated to any colour	sqm	4042.00	4035.00	3992.00	3992.00
14.6.2	Size up to: 900 mm x 1400 mm (total weight minimum 7.409 kg)					
14.6.2.1	Anodized to s.s colour/ black colour	sqm	5581.00	5571.00	5515.00	5515.00
14.6.2.2	Anodized to bronze colour	sqm	5592.00	5582.00	5526.00	5526.00
14.6.2.3	Anodized to silver colour	sqm	5625.00	5615.00	5560.00	5560.00
14.6.2.4	Powder coated to any colour	sqm	5625.00	5615.00	5560.00	5560.00

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Item No.	Description of Item	Unit	Unit Rate of Railway Division In Taka			
			Dhaka	Chattogram	Paksey	Lalmonirhat
14.7	Supplying, fitting and fixing of aluminium sliding composite window with mosquito mesh as per the U.S. Architectural Aluminium Manufacturer's Association (AAMA) standard specification and BDS 1879:2014 having 1.2 mm thick outer bottom (size 95.00 mm, 38 mm, 0.870 kg/m), 1.2 mm thick outer top (size 95.00 mm, 28.50 mm, 0.97kg/m), 1.2 mm thick shutter top (size 33 mm, 26.80 mm, 22 mm, 0.536 kg/m), 1.2 mm thick shutter bottom (size 60 mm, 24.40 mm, 0.736 kg/m), 1.2 mm thick outer side (size 95.00 mm, 19.50 mm, 0.738 kg/m), 1.2 mm thick shutter lock (size 49.20 mm, 26.2 mm, 0.661 kg/m), 1.2 mm thick shutter lock (size 34.40 mm, 32.10 mm, 0.665 kg/m), 1.2 mm thick mesh section (size 42.20 mm, 13.20 mm 0.460 kg/m), all aluminium members (total weight 12.79 kg) will be anodized to aluminium bronze/silver/ss/black colour with a coat not less than 15 micrones in thickness or powder coated to any colour with a coat not less than 25 micrones in thickness and density of 4 mg per square cm etc. including all accessories like sliding door key lock, sliding door wheel, sliding door mohiar, sliding door neoprene, bolts and nuts including sealants, keeping provision for fitting fiber mesh including labour charge for fitting of accessories, making grooves and mending good damages, carriage, and electricity complete in all respect as per drawing and accepted by the Engineer-in-charge.					
14.7.1	Size up to: 1524 mm x 1372 mm					
14.7.1.1	Anodized to s.s colour/ black colour	sqm	5198.00	5189.00	5129.00	5129.00
14.7.1.2	Anodized to bronze colour	sqm	5198.00	5189.00	5129.00	5129.00
14.7.1.3	Anodized to silver colour	sqm	5198.00	5189.00	5129.00	5129.00
14.7.1.4	Powder coated to any colour	sqm	5198.00	5189.00	5129.00	5129.00
14.7.2	Size up to: 1280 mm x 1372 mm					
14.7.2.1	Anodized to s.s colour/ black colour	sqm	5889.00	5878.00	5810.00	5810.00
14.7.2.2	Anodized to bronze colour	sqm	5889.00	5878.00	5810.00	5810.00
14.7.2.3	Anodized to silver colour	sqm	5889.00	5878.00	5810.00	5810.00
14.7.2.4	Powder coated to any colour	sqm	5889.00	5878.00	5810.00	5810.00
14.7.3	Size up to: 762 mm x 610 mm					
14.7.3.1	Anodized to s.s colour/ black colour	sqm	12161.00	12127.00	11945.00	11945.00
14.7.3.2	Anodized to bronze colour	sqm	12161.00	12127.00	11945.00	11945.00
14.7.3.3	Anodized to silver colour	sqm	12161.00	12127.00	11945.00	11945.00
14.7.3.4	Powder coated to any colour	sqm	12161.00	12127.00	11945.00	11945.00

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Item No.	Description of Item	Unit	Unit Rate of Railway Division In Taka			
			Dhaka	Chattogram	Paksey	Lalmonirhat
14.8	<p>Supplying, fitting and fixing of aluminium fixed composite window as per the U.S. Architectural Aluminium Manufacturer's Association (AAMA) standard specification and BDS 1879:2014 having 1.2 mm thick outer bottom (size 75.50 mm, 32 mm, 0.695 kg/m), 1.2 mm thick outer top (size 75.50mm, 26.80 mm, 0.78 kg/m), 1.2 mm thick shutter top (size 33 mm, 26.80 mm, 0.536 kg/m), 1.25 mm thick shutter bottom (size 60 mm, 24.40 mm, 0.736 kg/m), 1.2 mm thick outer side (size 75.50 mm, 19.90 mm, 0.616 kg/m), 1.2 mm thick sliding fixed side (size 31 mm, 26 mm, 0.422 kg/m), 1.2 mm thick shutter lock (size 49.20 mm, 26.20 mm, 0.661 kg/m), 1.2 mm thick inter lock (size 34.40 mm, 32.10 mm 0.665 kg/m) 1.2 mm thick bottom cover (size 37.78 mm, 31.78 mm, 0.313 kg/m), 1.2 mm thick groove cover (size 76.20 mm, 38.10 mm, 0.912 kg/m), 1.2 mm thick groove cover (size 57.15 mm, 15.80 mm, 0.452 kg/m) and 1.2 mm thick top and side (size 76.20 mm, 38.10 mm, 0.3 kg/m) sections all aluminium members (total weight 12.297 kg) will be anodized to aluminium bronze/silver/ss/black colour with a coat not less than 15 micrones in thickness or powder coated to any colour with a coat not less than 25 micrones in thickness and density of 4 mg per square cm etc.including all accessories like sliding door key lock, sliding door wheel, sliding door mohiar, sliding door neoprene, bolts and nuts including sealants, keeping provision for fitting 5 mm thick glass including labour charge for fitting of accessories, making grooves and mending good damages, carriage, and electricity complete in all respect as per drawing and accepted by the Engineer-in-charge.</p> <p>Size up to: 1500 mm x 2100 mm.</p>					
14.8.1	Anodized to s.s colour/ black colour	sqm	3857.00	3854.00	3815.00	3815.00
14.8.2	Anodized to bronze colour	sqm	3857.00	3854.00	3815.00	3815.00
14.8.3	Anodized to silver colour	sqm	3898.00	3894.00	3855.00	3855.00
14.8.4	Powder coated to any colour	sqm	3898.00	3894.00	3855.00	3855.00

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Item No.	Description of Item	Unit	Unit Rate of Railway Division In Taka			
			Dhaka	Chattogram	Paksey	Lalmonirhat
14.9	Supplying, fitting and fixing of aluminium top hung/casement windows as per the U.S. Architectural Aluminium Manufacturer's Association (AAMA) standard specification and BDS 1879:2014 having 1.2 mm thick casement outer (size 38.86 mm, 36.36 mm, 0.395kg/m), 1.9 mm thick casement shutter (size 47.62 mm, 28.57 mm, 0.692 kg/m), and 1.245 mm thick shutter glass clip (size 15.87 mm, 27 mm, 0.188 kg/m) sections of all aluminium members (total weight 7.584 kg) will be anodized to aluminium bronze/silver/ss/black colour with a coat not less than 15 microns in thickness or powder coated to any colour with a coat not less than 25 microns in thickness and density of 4 mg per square cm etc.including all accessories 4-bar hinge, casement handle, bolts and nuts keeping provision for fitting 5 mm thick glass including labour charge for fitting of accessories, making grooves and mending good damages, carriage, and electricity complete in all respect as per drawing and accepted by the Engineer-in-charge.					
14.9.1	Anodized to s.s colour/ black colour	sqm	12749.00	12738.00	12612.00	12612.00
14.9.2	Anodized to bronze colour	sqm	12749.00	12738.00	12612.00	12612.00
14.9.3	Anodized to silver colour	sqm	12749.00	12738.00	12612.00	12612.00
14.9.4	Powder coated to any colour	sqm	12654.00	12643.00	12516.00	12516.00
14.10	Supplying fitting and fixing of aluminium corrugated curtain wall as per the U.S. Architectural Aluminium Manufacturer's Association (AAMA) standard specification and BDS 1879:2014 having 1.2 mm thick bottom cover (size 37.78 mm 31.78 mm, 0.313 kg/m), 1.2 mm thick grouve cover (size 76.20 m 38.10 mm, 0.912 kg/m), 1.2 mm thick grouve cover (size 57.15 mm, 15.80 mm 0.45 kg/m), 1.2mm thick top and side (size 76.2 mm, 57.15 mm, 0.153 kg/m) and 1.8 mm thick spandrel (7.14 mm, 0.70 kg/m) sections of will be anodized to aluminium bronze/silver/ss/black colour with a coat not less than 15 microns in thickness or powder coated to any colour with a coat not less than 25 microns in thickness and density of 4 mg per square cm etc. including all accessories like rivet, screws fixed neoprene etc. complete in all respect as per drawing and accepted by the Engineer-in-charge.					
14.10.1	Size up to: 3000 mm x 2100 mm (Total weight 50.228 kg)					
14.10.1.	Anodized to s.s colour/ black colour	sqm	6287.00	6283.00	6242.00	6242.00

Item No.	Description of Item	Unit	Unit Rate of Railway Division In Taka			
			Dhaka	Chattogram	Paksey	Lalmonirhat
14.10.1.	Anodized to bronze colour	sqm	6287.00	6283.00	6242.00	6242.00
14.10.1.	Anodized to silver colour	sqm	6287.00	6283.00	6242.00	6242.00
14.10.1.	Powder coated to any colour	sqm	6287.00	6283.00	6242.00	6242.00
14.10.2	Size up to: 3000 mm x 750 mm (Total weight 26.136 kg)					
14.10.2.	Anodized to s.s colour/ black colour	sqm	8006.00	7996.00	7927.00	7927.00
14.10.2.	Anodized to bronze colour	sqm	8006.00	7996.00	7927.00	7927.00
14.10.2.	Anodized to silver colour	sqm	8006.00	7996.00	7927.00	7927.00
14.10.2.	Powder coated to any colour	sqm	8006.00	7996.00	7927.00	7927.00
14.11	Supplying fitting and fixing of aluminium fixed fan light as per the U.S. Architectural Aluminium Manufacturer's Association (AAMA) standard specification and BDS 1879:2014 having 1.2 mm thick bottom cover (size 76.2 mm, 38.10 mm, 0.76 kg/m) and 2.5 mm thick grouve cover section (size 57.15mm, 15.80 mm, 0.425 kg/m) and 1.2 thick top and side section (76.20 mm, 16 mm, 38.10 mm, 0.961 kg/m) fixed with above mentioned frames and all aluminium members (Total weight 5.365kg) will be anodized to aluminium bronze/silver/ss/black colour with a coat not less than 15 micrones in thickness or powder coated to any colour with a coat not less than 25 micrones in thickness and density of 4 mg per square cm etc. including all accessories, neoprene, sealant, nut and bolt etc. complete in all respect as per drawing and accepted by the Engineer-in-charge.					
14.11.1	Anodized to s.s colour/ black colour	sqm	5110.00	5091.00	4987.00	4987.00
14.11.2	Anodized to bronze colour	sqm	5110.00	5091.00	4987.00	4987.00
14.11.3	Anodized to silver colour	sqm	4601.00	4594.00	4536.00	4536.00
14.11.4	Powder coated to any colour	sqm	4601.00	4594.00	4536.00	4536.00

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Item No.	Description of Item	Unit	Unit Rate of Railway Division In Taka			
			Dhaka	Chattogram	Paksey	Lalmonirhat
14.12	Supplying fitting and fixing of aluminium fixed louver as per the U.S. Architectural Aluminium Manufacturer's Association (AAMA) standard specification and BDS 1879:2014 having 1.2mm thick wall frame (size 76.20 mm, 38.10 mm, 0.707 kg/m), 5 mm thick louver section (size 55.02 mm, 37.39 mm, 0.22kg/m) and 2.50 mm thick louver outer section (size 39.67 mm, 15.06 mm, 0.265 kg/m) and inner inclined aluminium louver section fixed with above mentioned frame and all aluminium members (total weight 7.992 kg) will be anodized to aluminium bronze/silver/ss/black colour with a coat not less than 15 microns in thickness or powder coated to any colour with a coat not less than 25 microns in thickness and density of 4 mg per square cm etc. including all accessories, neoprene, sealant, nuts and bolts etc. complete in all respect as per drawing and accepted by the Engineer-in-charge.					
14.12.1	Anodized to s.s colour/ black colour	sqm	8704.00	8669.00	8504.00	8504.00
14.12.2	Anodized to bronze colour	sqm	8704.00	8669.00	8504.00	8504.00
14.12.3	Anodized to silver colour	sqm	8704.00	8669.00	8504.00	8504.00
14.12.4	Powder coated to any colour	sqm	8704.00	8669.00	8504.00	8504.00
14.13	Supplying, fitting, fixing of aluminium sliding fly proof Netting shutter as per the U.S. Architectural Aluminium Manufacturer's Association (AAMA) standard specification and BDS 1879:2014 having 1.2mm thick outer frame (size 38mm x 18mm), 1.2mm thick mosquito net shutter frame mesh section (size 38mm x 12mm). All aluminium members (total weight 12.79 kg) will be anodized to aluminium bronze/silver/ss/black colour with a coat not less than 15 microns in thickness or powder coated to any colour with a coat not less than 25 microns in thickness and density of 4 mg per square cm etc. including all accessories like wheel, sealant, rubber, bolts and nuts keeping provision for fitting fiber mesh including labour charge for fitting of accessories, making grooves and mending good damages, carriage, and electricity, all complete in all respect as per drawing and accepted by the Engineer-in-charge.					
14.13.1	Anodized to s.s colour/ black colour	sqm	3324.00	3322.00	3307.00	3307.00
14.13.2	Anodized to bronze colour	sqm	3324.00	3322.00	3307.00	3307.00
14.13.3	Anodized to silver colour	sqm	3324.00	3322.00	3307.00	3307.00
14.13.4	Powder coated to any colour	sqm	3324.00	3322.00	3307.00	3307.00

Item No.	Description of Item	Unit	Unit Rate of Railway Division In Taka			
			Dhaka	Chattogram	Paksey	Lalmonirhat
14.14	Supplying, fitting and fixing in Aluminium door frames, windows, partitions and curtain wall distortion free glass of approved quality and shade including cost of fitting fixing all necessary accessories etc. complete in all respect as per drawing and accepted by the Engineer-in-charge.					
14.14.1.	5 mm thick clear glass	sqm	1374.00	1368.00	1341.00	1341.00
14.14.1.	6 mm thick clear glass	sqm	1625.00	1619.00	1592.00	1592.00
14.14.2.	5 mm thick tinted glass	sqm	1638.00	1631.00	1605.00	1605.00
14.14.3.	5 mm thick ambushed/ frosted glass	sqm	1360.00	1354.00	1327.00	1327.00
14.14.4.	5 mm thick reflecting glass	sqm	1532.00	1530.00	1518.00	1518.00
14.14.4.	6 mm thick reflecting glass	sqm	1704.00	1701.00	1690.00	1690.00
14.15	Supplying, fabrication and Installation of approved colour (4 mm thick) Aluminium composite panel (Alucobond/Alcopanel/Alpolic) as per US Architectural Aluminium Manufacturer's Association (AAMA) in column, beam and wall surface providing with 44 mm x 44 mm x 1.5 mm aluminum section including supply of necessary hardwares, consumables, scaffolding etc. fitted with necessary accessories like rivet, screw, rowel bolt etc. all complete in all respect as per drawing and direction of the Engineer-in-charge.	sqm	7548.00	7544.00	7490.00	7490.00
14.16	Supplying, fitting and fixing of aluminium curtain wall with aluminium top hung/casement windows as per the US Architectural Aluminium Manufacturer's Association (AAMA) standard specification and BDS 1879:2014 having 100 mm , 50mm, 2mm curtain wall sub-mullim outer and inner frame, 15 mm thick casement outer frame (size 38.86 mm 36.6 mm), 1.9 mm thick casement shutter (size 47.62 mm, 28.57 mm,) 1.2 mm thick shutter glass strips, all aluminium member will be powder coated with coat not less than 1.5 micron in thickness including all accessories 4 bar hinge casement handle, 50 mm x 50 mm x 6 mm aluminium angle, steel rowel bolt, screws , rivets norton tape masking tape, structural sealant, gum bracket rod etc. all complete in all respect as per drawing and direction of the Engineer-in-charge.	sqm	10676.00	10664.00	10515.00	10515.00

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Item No.	Description of Item	Unit	Unit Rate of Railway Division In Taka			
			Dhaka	Chattogram	Paksey	Lalmonirhat
14.17	Supplying, fitting and fixing of aluminium curtain wall and aluminium top hung/casement windows ad per the US Architectural Aluminium Manufacturer's Association (AAMA) standard specification and BDS 1879:2014 having 50 mm , 50 mm, 2 mm curtain wall sub-mullim outer and inner frame, 15 mm thick casement outer frame (size 38.86 mm 36.6 mm), 1.9 mm thick casement shutter (size 47.62mm, 28.57mm,) 1.2 mm thick shutter glass strips, all aluminium member will be powder coated with coat not less than 1.5 micron in thickness including all accessories 4 bar hinge casement handle, 50 mm x 50 mm x 6 mm aluminium angle, steel rowel bolt, screws , rivets norton tape masking tape, structural sealant, gum bracket rod etc. all complete in all respect as per drawing and direction of the Engineer-in-charge.	sqm	9210.00	9197.00	9049.00	9049.00
14.18	Supplying, fitting and fixing of aluminium curtain wall along with 10 mm thick clear tempered glass as per the US Architectural aluminium Manufacturer's Association (AAMA) Standard Specification and BDS 1879:2014 having 115 mm , 64 mm, 3 mm curtain wall sub-mullim outer and inner frame, 15 mm thick casement outer frame (size 38.86 mm 36.6mm), 1.9 mm thick casement shutter (size 47.62 mm, 28.57 mm,) 1.2 mm thick shutter glass strips, all aluminium member will be powder coated with coat not less than 1.5 micron in thickness including all accessories 4 bar hinge casement handle, 50 m x 50mm x 6m aluminium angle, steel rowel bolt, screws , rivets norton tape masking tape, structural sealant, gum bracket rod etc. all complete in all respect as per drawing and direction of the Engineer-in-charge.	sqm	11329.00	11318.00	11236.00	11236.00
14.19	Supplying, fitting and fixing of 12 mm thick clear tempered glass wall upto 3.0 m height with vertical fin glass support of same thickness and support shall be at least 1.2 m c/c fixed properly with glass by silicon glue with supply and fittings of all required accessories such as SS u channel, nut bolts, aluminium angle, steel rowel bolt, screws , rivets norton tape masking tape, structural sealant, gum bracket rod etc. all complete in all respect as per drawing and direction of the Engineer-in-charge.	sqm	21737.00	21723.00	21620.00	21620.00





Item No.	Description of Item	Unit	Unit Rate of Railway Division In Taka			
			Dhaka	Chattogram	Paksey	Lalmonirhat
14.20	Supplying, fitting and fixing of 12 mm thick tempered glass wall from 3.0 m to 6.0 m height with spider point fixing joint and vertical fin glass support of same thickness, support shall be at least 1.2 m c/c fixed properly with main glass by silicon glue with supply and fittings of all required accessories such as SS u channel, nut bolts, aluminium angle, steel rowel bolt, screws , rivets norton tape masking tape, structural sealant, gum bracket rod etc. all complete in all respect as per drawing and direction of the Engineer-in-charge.	sqm	21573.00	21564.00	21478.00	21478.00
14.21	Supplying, fitting and fixing of 12 mm thick clear tempered glass wall from 6.0 m to 8.2 m height with spider point fixing joint and vertical/horizontal fin glass support of double thickness, support shall be at least 2 m c/c fixed properly with main glass by silicon glue with supply and fittings of all required accessories such as SS u channel, nut bolts, aluminium angle, steel rowel bolt, screws , rivets norton tape masking tape, structural sealant, gum bracket rod etc. all complete in all respect as per drawing and direction of the Engineer-in-charge.	sqm	21858.00	21851.00	21752.00	21752.00

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Item No.	Description of Item	Unit	Unit Rate of Railway Division In Taka			
			Dhaka	Chattogram	Paksey	Lalmonirhat
CHAPTER 15 : CEMENT PLASTER, FAIR-FACE PLASTER AND POINTING WORKS						
Item No.	Description of Item	Unit	Unit Rate of Railway Division In Taka			
			Dhaka	Chattogram	Paksey	Lalmonirhat
15.1	Minimum 12 mm thick cement sand (F.M.≥ 1.2) plaster (1:4) with fresh cement to both inner-and outer surface of wall, finishing the corner and edges including washing of sand, cleaning the surface, curing at least for 7 days, cost of water, electricity, scaffolding and other charges etc. all complete in all respect as per drawing and accepted by the Engineer-in-charge. (Cement: CEM-II/A-M) ground floor. (Retail)	sqm	319.00	317.00	301.00	301.00
15.1a	Minimum 12 mm thick cement sand (F.M.≥ 1.2) plaster (1:4) with fresh cement to both inner-and outer surface of wall, finishing the corner and edges including washing of sand, cleaning the surface, curing at least for 7 days, cost of water, electricity, scaffolding and other charges etc. all complete in all respect as per drawing and accepted by the Engineer-in-charge. (Cement: CEM-II/A-M) ground floor. (Bulk)	sqm	315.00	313.00	297.00	297.00
15.2	Minimum 12 mm thick cement sand (F.M.≥ 1.2) plaster with neat cement finishing to plinth wall with cement (1:4) up to 150 mm below ground level including washing of sand, finishing the edges and corners and curing at least for 7 days, cost of water, electricity, scaffolding and other charges etc. all complete in all respect as per drawing and accepted by the Engineer-in-charge. (Cement: CEM-II/A-M) ground floor. (Retail)	sqm	387.00	385.00	365.00	365.00
15.2a	Minimum 12 mm thick cement sand (F.M.≥ 1.2) plaster with neat cement finishing to plinth wall with cement (1:4) up to 150 mm below ground level including washing of sand, finishing the edges and corners and curing at least for 7 days, cost of water, electricity, scaffolding and other charges etc. all complete in all respect as per drawing and accepted by the Engineer-in-charge. (Cement: CEM-II/A-M) ground floor. (Bulk)	sqm	382.00	380.00	360.00	360.00

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Item No.	Description of Item	Unit	Unit Rate of Railway Division In Taka			
			Dhaka	Chattogram	Paksey	Lalmonirhat
15.3	Minimum 12 mm thick cement sand (F.M.≥ 1.2) plaster with neat cement finishing to dado with cement (1:4) up to 150 mm including washing of sand, finishing the edges and corners and curing at least for 7 days, cost of water, electricity, scaffolding and other charges etc. all complete in all respect as per drawing and accepted by the Engineer-in-charge. (Cement: CEM-II/A-M) ground floor. (Retail)	sqm	405.00	403.00	384.00	384.00
15.3a	Minimum 12 mm thick cement sand (F.M.≥ 1.2) plaster with neat cement finishing to dado with cement (1:4) up to 150 mm including washing of sand, finishing the edges and corners and curing at least for 7 days, cost of water, electricity, scaffolding and other charges etc. all complete in all respect as per drawing and accepted by the Engineer-in-charge. (Cement: CEM-II/A-M) ground floor. (Bulk)	sqm	400.00	397.00	378.00	378.00
15.4	Minimum 12 mm thick cement sand (F.M.≥ 1.2) plaster (1:6) having with fresh cement to both inner and outer surface of wall, finishing the edges and corners including washing of sand, cleaning the surface, curing at least for 7 days, cost of water, electricity, scaffolding and other charges etc. all complete in all respect as per drawing and accepted by the Engineer-in-charge. (Cement: CEM-II/A-M) ground floor. (Retail)	sqm	307.00	305.00	288.00	288.00
15.4a	Minimum 12 mm thick cement sand (F.M.≥ 1.2) plaster (1:6) having with fresh cement to both inner and outer surface of wall, finishing the edges and corners including washing of sand, cleaning the surface, curing at least for 7 days, cost of water, electricity, scaffolding and other charges etc. all complete in all respect as per drawing and accepted by the Engineer-in-charge. (Cement: CEM-II/A-M) ground floor. (Bulk)	sqm	304.00	302.00	285.00	285.00

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Item No.	Description of Item	Unit	Unit Rate of Railway Division In Taka			
			Dhaka	Chattogram	Paksey	Lalmonirhat
15.5	Minimum 6 mm thick cement sand (F.M.≥ 1.2) plaster (1:4) with fresh cement to ceiling, R.C.C. columns, beams, surface of stair case, sunshades, cornices, railings, drop wall, louvers, fins and finishing the corners and edges including washing of sand, cleaning the surface, curing at least for 7 days, cost of water, electricity, scaffolding and other charges etc. all complete in all respect as per drawing and accepted by the Engineer-in-charge. (Cement: CEM-II/A-M) ground floor. (Retail)	sqm	302.00	299.00	281.00	281.00
15.5a	Minimum 6 mm thick cement sand (F.M.≥ 1.2) plaster (1:4) with fresh cement to ceiling, R.C.C. columns, beams, surface of stair case, sunshades, cornices, railings, drop wall, louvers, fins and finishing the corners and edges including washing of sand, cleaning the surface, curing at least for 7 days, cost of water, electricity, scaffolding and other charges etc. all complete in all respect as per drawing and accepted by the Engineer-in-charge. (Cement: CEM-II/A-M) ground floor. (Bulk)	sqm	300.00	297.00	279.00	279.00
15.6	Minimum 6 mm thick cement sand (F.M.≥ 1.2) plaster (1:3) with fresh cement to ceiling, R.C.C. columns, beams, surface of stair case, sunshades, cornices, railings, drop wall, louvers, fins and finishing the corners and edges including washing of sand, cleaning the surface, curing at least for 7 days, cost of water, electricity, scaffolding and other charges etc. all complete in all respect as per drawing and accepted by the Engineer-in-charge. (Cement: CEM-II/A-M) ground floor. (Retail)	sqm	298.00	296.00	279.00	279.00
15.6a	Minimum 6 mm thick cement sand (F.M.≥ 1.2) plaster (1:3) with fresh cement to ceiling, R.C.C. columns, beams, surface of stair case, sunshades, cornices, railings, drop wall, louvers, fins and finishing the corners and edges including washing of sand, cleaning the surface, curing at least for 7 days, cost of water, electricity, scaffolding and other charges etc. all complete in all respect as per drawing and accepted by the Engineer-in-charge. (Cement: CEM-II/A-M) ground floor. (Bulk)	sqm	295.00	292.00	276.00	276.00

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Item No.	Description of Item	Unit	Unit Rate of Railway Division In Taka			
			Dhaka	Chattogram	Paksey	Lalmonirhat
15.7	Flush pointing to brick wall with cement sand (F.M.≥ 1.2) mortar (1:2) with cement including raking out the joints, curing at least for 7 days, cost of water, electricity, scaffolding and other charges etc. all complete in all respect as per drawing and accepted by the Engineer-in-charge. (Cement: CEM-II/A-M) ground floor. (Retail)	sqm	179.00	178.00	167.00	167.00
15.7a	Flush pointing to brick wall with cement sand (F.M.≥ 1.2) mortar (1:2) with cement including raking out the joints, curing at least for 7 days, cost of water, electricity, scaffolding and other charges etc. all complete in all respect as per drawing and accepted by the Engineer-in-charge. (Cement: CEM-II/A-M) ground floor. (Bulk)	sqm	200.00	198.00	186.00	186.00
15.8	Rule pointing to brick wall with cement sand (F.M.≥ 1.2) mortar (1:2) with fresh cement and raking out the joints, curing at least for 7 days, cost of water, electricity, scaffolding and other charges etc. all complete in all respect as per drawing and accepted by the Engineer-in-charge. (Cement: CEM-II/A-M) ground floor. (Retail)	sqm	241.00	239.00	225.00	225.00
15.8a	Rule pointing to brick wall with cement sand (F.M.≥ 1.2) mortar (1:2) with fresh cement and raking out the joints, curing at least for 7 days, cost of water, electricity, scaffolding and other charges etc. all complete in all respect as per drawing and accepted by the Engineer-in-charge. (Cement: CEM-II/A-M) ground floor. (Bulk)	sqm	239.00	237.00	223.00	223.00
15.9	Raised or tack pointing work to brick wall with cement sand (F.M.≥ 1.2) mortar (1:2) with fresh cement of minimum 12 mm x 20 mm in size including raking out the joints and necessary scaffolding, curing at least for 7 days, cleaning each and every brick, cutting the bricks with pumice stone where necessary etc. all complete in all floors, cost of water, electricity, scaffolding and other charges etc. all complete in all respect as per drawing and accepted by the Engineer-in-charge. (Cement: CEM-II/A-M) ground floor. (Retail)	sqm	620.00	612.00	577.00	577.00

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Item No.	Description of Item	Unit	Unit Rate of Railway Division In Taka			
			Dhaka	Chattogram	Paksey	Lalmonirhat
15.9a	Raised or tack pointing work to brick wall with cement sand (F.M.≥ 1.2) mortar (1:2) with fresh cement of minimum 12 mm x 20 mm in size including raking out the joints and necessary scaffolding, curing at least for 7 days, cleaning each and every brick, cutting the bricks with pumice stone where necessary etc. all complete in all floors, cost of water, electricity, scaffolding and other charges etc. all complete in all respect as per drawing and accepted by the Engineer-in-charge. (Cement: CEM-II/A-M) ground floor. (Bulk)	sqm	616.00	609.00	573.00	573.00
15.10	Providing drip course or nosing at the edge of sunshade or cornice with cement sand (F.M.≥ 1.2) mortar (1:2) with fresh cement, curing at least for 7 days, cost of water, electricity, scaffolding and other charges etc. all complete in all respect as per drawing and accepted by the Engineer-in-charge. (Retail)	meter	163.00	162.00	151.00	151.00
15.10a	Providing drip course or nosing at the edge of sunshade or cornice with cement sand (F.M.≥ 1.2) mortar (1:2) with fresh cement, curing at least for 7 days, cost of water, electricity, scaffolding and other charges etc. all complete in all respect as per drawing and accepted by the Engineer-in-charge. (Bulk)	meter	174.00	173.00	161.00	161.00
15.11.1	Making groove in plaster on outside wall upto 50 mm X 6 mm size including scaffolding, curing etc. complete as per drawing and accepted by the Engineer-in-charge.	meter	29.00	28.00	26.00	26.00
15.11.2	Making groove in plaster on outside wall upto 38 mm X 6 mm size including scaffolding, curing etc. complete as per drawing and accepted by the Engineer-in-charge.	meter	46.00	45.00	42.00	42.00

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Item No.	Description of Item	Unit	Unit Rate of Railway Division In Taka			
			Dhaka	Chattogram	Paksey	Lalmonirhat
15.12	Minimum 10 mm thick fair face plaster using premix cement plaster (CP2 LGT/Stucco base premix or equivalent); initial background should be 19 mm rough cement plaster (1:4); then after passing 7 days curing time surface of newly constructed rough plaster should be thoroughly cleaned using a stiff brush to remove any dust, loose particles, wood pieces, mould oil etc, then the background needs to be thoroughly neutralized by applying potable water; Mixing premix cement plaster with water at water/powder ratio according to the specification of the manufacturer to form paste and apply on rough plaster surface; powder for making paste must be mixed with potable water only; apply the paste on the rough plaster surface by trowel to get smooth and shiny surface and cure the finished plaster surface for 2-3 days(3-4 times daily); finally water repellent coating to protect concrete surface; all complete with necessary scaffolding etc. accepted by the Engineer-in-charge.(Rate is excluding the cost of 19 mm thick rough cement the field office, including foundations, access roads, shades, layout of electrica	sqm	2090.00	2083.00	2031.00	2031.00
15.13.1	Making groove in fair face plaster on outside wall upto 50 mm X 6 mm size including scaffolding, curing etc. complete as per drawing and accepted by the Engineer-in-charge.	meter	55.00	54.00	52.00	52.00
15.13.2	Making groove in fair face plaster on outside wall upto 38 mm X 6 mm size including scaffolding, curing etc. complete as per drawing and accepted by the Engineer-in-charge.	meter	73.00	72.00	69.00	69.00

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Item No.	Description of Item	Unit	Unit Rate of Railway Division In Taka			
			Dhaka	Chattogram	Paksey	Lalmonirhat
15.14	Minimum 1mm thick fair face coating using Master Emaco N 303 Rendroc FC/Top Crete 220 or equivalent product micro topping skim coat, a high performance single component polymer fortified, colored, cementitious micro topping that can be applied on a variety of horizontal and vertical plaster surfaces; initially background should be thoroughly cleaned using a stiff brush to remove any dust, loose particles, mould oil etc.; then the background needs to be thoroughly neutralized by applying potable water ; The ratio of fair face coating and water is 1.5:1 to 2:1 or as required for workability ; powder will be mixed with potable water in a drum by blending machine; the mixture can be spread to any horizontal and vertical plaster surface using trowel to get smooth and shiny surface; all complete with necessary scaffolding etc. accepted by the Engineer-in-charge. (Rate is excluding the cost of 19 mm thick rough cement plaster)Ground floor.	sqm	1509.00	1507.00	1479.00	1479.00
15.15.1	Minimum 12mm thick cement sand (F.M.≥ 1.2) water proof, damp proof, dry and breathable plaster (1:4) with water proof Izonil Cement (STN-EN - 1015-11 , Compressive Strength 34 MPa ,Max depth of water penetration into hardened plaster is < 1 mm) or equivalent compound to wall surface, finishing the corner and edges including washing of sand, cleaning the surface, scaffolding and curing at least for 3 days, cost of water, electricity and other charges etc. all complete in all respect as per drawing and accepted by the Engineer –in-charge. (Izonil Cement/equivalent compound: Water proof, damp proof, dry and breathable cement). (Retail)	sqm	676.00	673.00	654.00	654.00
15.15.1a	Minimum 12mm thick cement sand (F.M.≥ 1.2) water proof, damp proof, dry and breathable plaster (1:4) with water proof Izonil Cement (STN-EN - 1015-11 , Compressive Strength 34 MPa ,Max depth of water penetration into hardened plaster is < 1 mm) or equivalent compound to wall surface, finishing the corner and edges including washing of sand, cleaning the surface, scaffolding and curing at least for 3 days, cost of water, electricity and other charges etc. all complete in all respect as per drawing and accepted by the Engineer –in-charge. (Izonil Cement/equivalent compound: Water proof, damp proof, dry and breathable cement). (Bulk)	sqm	675.00	672.00	653.00	653.00

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Item No.	Description of Item	Unit	Unit Rate of Railway Division In Taka			
			Dhaka	Chattogram	Paksey	Lalmonirhat
15.15.2	Minimum 19mm thick cement sand (F.M.≥ 1.2) water proof, damp proof, dry and breathable plaster (1:4) with water proof Izonil Cement (STN-EN - 1015-11 , Compressive Strength 34 MPa ,Max depth of water penetration into hardened plaster is < 1 mm) /equivalent compound to wall surface, finishing the corner and edges including washing of sand, cleaning the surface, scaffolding and curing at least for 3 days, cost of water, electricity and other charges etc. all complete in all respect as per drawing and accepted by the Engineer –in-charge. (Izonil Cement/equivalent compound: Water proof, damp proof, dry and breathable cement). (Retail)	sqm	861.00	859.00	839.00	839.00
15.15.2a	Minimum 19mm thick cement sand (F.M.≥ 1.2) water proof, damp proof, dry and breathable plaster (1:4) with water proof Izonil Cement (STN-EN - 1015-11 , Compressive Strength 34 MPa ,Max depth of water penetration into hardened plaster is < 1 mm) /equivalent compound to wall surface, finishing the corner and edges including washing of sand, cleaning the surface, scaffolding and curing at least for 3 days, cost of water, electricity and other charges etc. all complete in all respect as per drawing and accepted by the Engineer –in-charge. (Izonil Cement/equivalent compound: Water proof, damp proof, dry and breathable cement). (Bulk)	sqm	860.00	858.00	838.00	838.00
15.16.1	Add for each additional floor up to 5th floor.	sqm	18.00	18.00	17.00	17.00
15.16.2	Add for each additional floor for 6th floor to 9th floor	sqm	27.00	26.00	24.00	24.00
15.16.3	Add for each additional floor 10th floor and above	sqm	36.00	36.00	33.00	33.00
15.17	Pre-cast ventilators of minimum 25 mm thick of any design with cement sand (F.M.≥ 1.2) mortar (1:4) fitted and fixed in position, finishing with cement sand (F.M.≥ 1.2) plaster (1:6) including necessary scaffolding and curing, in all floors accepted by the Engineer-in-charge. (Cement: CEM-II/A-M) (Retail)	sqm	2631.00	2614.00	2465.00	2465.00
15.17a	Pre-cast ventilators of minimum 25 mm thick of any design with cement sand (F.M.≥ 1.2) mortar (1:4) fitted and fixed in position, finishing with cement sand (F.M.≥ 1.2) plaster (1:6) including necessary scaffolding and curing, in all floors accepted by the Engineer-in-charge. (Cement: CEM-II/A-M) (Bulk)	sqm	3002.00	2985.00	2809.00	2809.00

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Item No.	Description of Item	Unit	Unit Rate of Railway Division In Taka			
			Dhaka	Chattogram	Paksey	Lalmonirhat
15.18	75 mm x 75 mm cornice of brick masonry in cement sand (F.M.≥ 1.2) mortar (1:6) having minimum 12 mm thick cement sand (F.M.≥ 1.2) plaster (1:6) including scaffolding and curing at least for 7 days in all floors accepted by the Engineer-in-charge. (Cement: CEM-II/A-M) (Retail)	meter	304.00	300.00	281.00	281.00
15.18a	75 mm x 75 mm cornice of brick masonry in cement sand (F.M.≥ 1.2) mortar (1:6) having minimum 12 mm thick cement sand (F.M.≥ 1.2) plaster (1:6) including scaffolding and curing at least for 7 days in all floors accepted by the Engineer-in-charge. (Cement: CEM-II/A-M) (Bulk)	meter	346.00	341.00	319.00	319.00
15.19	Supplying, fitting, fixing of broken and sharp glass 19 mm to 32 mm height, av. 19 mm width placed at a distance approximately 25 mm center to center, embedding the same to 12 mm to 19 mm thick cement plaster with neat cement finishing including necessary scaffolding approved and accepted by the Engineer-in-charge. (Cement: CEM-II/A-M)	sqm	301.00	299.00	292.00	292.00

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Item No.	Description of Item	Unit	Unit Rate of Railway Division In Taka			
			Dhaka	Chattogram	Paksey	Lalmonirhat
CHAPTER 16 : PAINTING AND POLISHING						
Item No.	Description of Item	Unit	Unit Rate of Railway Division In Taka			
			Dhaka	Chattogram	Paksey	Lalmonirhat
16.1.1	Exterior standard acrylic emulsion paint of approved best quality and color having water resisting properties and resistance properties against fungi, fading & flaking delivered from authorized local agent of the manufacturer (Berger weather coat smooth/ Elite smooth exterior/ Asian apex weather coat or equivalent brand) in a sealed container; applying to exterior surface with surface preparation including cleaning, drying, making free from dirt, grease, wax, removing all chalked and scaled materials, fungus, mending good the surface defects using sand paper and necessary scaffolding; applying 1 coat of exterior sealer of specified brand on prepared surface; then applying 1 coat of exterior putty of specified brand for levelling, spot filling, crack filling and cutting by sand paper/zero water paper; finally applying 2 coats of exterior emulsion paint spreading by brush/roller/spray & necessary scaffolding etc. upto desired finishing, elapsing specified time for drying or recoating; all complete in all floors the field office, including foundations,	sqm	274.00	273.00	261.00	261.00

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Item No.	Description of Item	Unit	Unit Rate of Railway Division In Taka			
			Dhaka	Chattogram	Paksey	Lalmonirhat
16.1.2	Exterior premium acrylic emulsion paint of approved best quality and color with high performance against dirt picking tendency and efflorescence resistance properties along with water resisting properties and resistance properties against fungi, fading and flaking from authorized local agent of the manufacturer (Berger Weather Coat Antidirt Long Life/ Elite Master Coat/ Asian Apex Ultima or equivalent brand) in a sealed container; applying to exterior surface with surface preparation including cleaning drying, making free from dirt, grease, wax, removing all chalked and scaled materials, fungus, mending good the surface defects using sand paper and necessary scaffolding; applying 1 coat of exterior sealer of specified brand on prepared surface; then applying 1 coat of exterior putty of specified brand for levelling, spot filling, crack filling and cutting by sand paper/zero water paper; finally applying 2 coats of exterior emulsion paint spreading by brush/roller/spray & necessary scaffolding etc. upto desired the field office, including foundations, access roads, shades, layout of electrical and water supply and hard standings thereto f	sqm	298.00	297.00	286.00	286.00
16.2.1	Interior standard acrylic emulsion paint (plastic or matt finish) of approved best quality and colour delivered from authorized local agent of the manufacturer (Berger robbialac plastic emulsion/Asian apcolite plastic emulsion or equivalent brand) in a sealed container; applying to interior wall and ceiling with surface preparation including cleaning drying, making free from dirt, grease, wax, removing all chalked and scaled materials, fungus, mending good the surface defects using sand paper and necessary scaffolding; applying 1 coat of interior sealer of specified brand on prepared surface; then applying 1 coat of interior putty of specified brand for levelling, spot filling, crack filling and cutting by sand paper/zero water paper; finally applying 2 coats of interior emulsion paint spreading by brush/roller/spray & necessary scaffolding etc. upto desired finishing, elapsing specified time for drying or recoating; all complete in all floors and accepted by the Engineer-in-charge.	sqm	258.00	256.00	244.00	244.00







Item No.	Description of Item	Unit	Unit Rate of Railway Division In Taka			
			Dhaka	Chattogram	Paksey	Lalmonirhat
16.2.2	Interior premium acrylic emulsion painting (silky finish) of approved best quality and colour delivered from authorized local agent of the manufacturer(Berger luxury silk emulsion/Elite super aclose silky finish/Asian royal luxury silk emulsion or equivalent brand) in a sealed container; applying to interior wall and ceiling with surface preparation including cleaning drying, making free from dirt, grease, wax, removing all chalked and scaled materials, fungus, mending good the surface defects using sand paper and necessary scaffolding; applying 1 coat of interior sealer of specified brand on prepared surface; then applying 1 coat of interior putty of specified brand for levelling, spot filling, crack filling and cutting by sand paper/zero water paper; finally applying 2 coats of interior emulsion paint spreading by brush/roller/spray & necessary scaffolding etc. upto desired finishing, elapsing specified time for drying or recoating; all complete in all floors and accepted by the Engineer-in-charge.	sqm	283.00	282.00	270.00	270.00
16.2.3	Interior super premium acrylic emulsion painting (odorless) of approved best quality and colour delivered from authorized local agent of the manufacturer(Berger breath easy or equivalent brand) in a sealed container; applying to interior wall and ceiling with surface preparation including cleaning drying, making free from dirt, grease, wax, removing all chalked and scaled materials, fungus, mending good the surface defects using sand paper and necessary scaffolding; applying 1 coat of interior sealer of specified brand on prepared surface; then applying 1 coat of interior putty of specified brand for levelling, spot filling, crack filling and cutting by sand paper/zero water paper, finally applying 2 coats of interior emulsion paint spreading by brush/roller/spray & necessary scaffolding etc. upto desired finishing, elapsing specified time for drying or recoating; all complete in all floors accepted by the Engineer-in-charge.	sqm	314.00	312.00	300.00	300.00

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Item No.	Description of Item	Unit	Unit Rate of Railway Division In Taka			
			Dhaka	Chattogram	Paksey	Lalmonirhat
16.3.1	Standard Synthetic Enamel paint of approved best quality and colour delivered from authorized local agent of the manufacturer (Berger jhlik synthetic enamel/Elite quick drying/Asian decora synthetic enamel or equivalent brand) in a sealed container, having high water resistance, high bondibility, flexibility property; using specified brand thinner applying to metallic or wooden surface by brass/roller/spray in 2 coats over single coat anti-corrosive coating including cleaning, drying, making free from dirt, grease, wax, removing all chalked and scaled materials, all complete in all floors and accepted by the Engineer-in-charge.	sqm	229.00	227.00	215.00	215.00
16.3.2	Premium Synthetic Enamel paint of approved best quality and colour delivered from authorized local agent of the manufacturer (Berger robbialac supergloss synthetic enamel/Elite lucky seven/Asian apcolipe premium paint or equivalent brand) in a sealed container, having high water resistance, high bondibility, flexibility property; using specified brand thinner applying to metallic or wooden surface by brass/roller/spray in two coats over single coat anti-corrosive coating including cleaning, drying, making free from dirt, grease, wax, removing all chalked and scaled materials, all complete in all floors and accepted by the Engineer in-charge.	sqm	238.00	237.00	225.00	225.00

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Item No.	Description of Item	Unit	Unit Rate of Railway Division In Taka			
			Dhaka	Chattogram	Paksey	Lalmonirhat
16.4	Interior design paint of approved best quality and colour delivered from authorized local agent of the manufacturer (Berger illusion/Elite elunima/Asian royal play or equivalent brand) in a sealed container; applying to interior wall and ceiling with surface preparation including cleaning drying, making free from dirt, grease, wax, removing all chalked and scaled materials, fungus, mending good the surface defects using sand paper and necessary scaffolding; applying 1 coat of interior sealer of specified brand on prepared surface; then applying 1 coat of interior putty of specified brand for levelling, spot filling, crack filling and cutting by sand paper/zero water paper; applying 3 coats of interior design paint; 1st coat on prepared surface, then applying 1 design coat on the 1st coat and finally applying 1 protection coat on the design coat for protecting the design spreading by brush/roller/spray & necessary scaffolding etc. upto desired finishing, elapsing specified time for drying or recoating; the field office, including foundations, access roads, shades, lay	sqm	895.00	890.00	850.00	850.00
16.5	Textured paint of approved best quality and colour delivered from authorized local agent of the manufacturer in a sealed container; applying to interior wall and ceiling including surface preparation including cleaning drying, making free from dirt, grease, wax, removing all chalked and scaled materials, fungus if required must be treated with fungicidal solution, mending good the surface defects using sand paper and necessary scaffolding; applying 1 coat of interior sealer of specified brand on prepared surface; then applying 1 coat of interior putty of specified brand for levelling, spot filling, crack filling and cutting by sand paper/zero water paper; applying 3 coats of texture paint; 1st coat on prepared surface, then applying 1 texture coat on the 1st coat and finally applying 1 top coat on the texture coat upto desired finishing by brush/roller/spray etc. with necessary scaffolding; all complete in all floors and accepted by the Engineer-in-charge.	sqm	766.00	762.00	741.00	741.00

Item No.	Description of Item	Unit	Unit Rate of Railway Division In Taka			
			Dhaka	Chattogram	Paksey	Lalmonirhat
16.6	Chlorinated rubber paint of approved quality and colour delivered from authorized local agent of the manufacturer in a sealed container; surface preparation including cleaning, drying, making free from dirt, grease, wax, removing all chalked and scaled materials, fungus (if required must be treated with fungicidal solution) flaking paints, washing the surface with soap water/caustic soda, mending good the surface defects, smoothening the surface by putty, sand papering the surface; applying to concrete surfaces and walls in three coats by brush/roller/spray etc. upto desired finishing, elapsing specified time for drying and re-coating; with necessary scaffolding all complete in all floors and accepted by the Engineer-in-charge.	sqm	391.00	389.00	374.00	374.00
16.7	Epoxy Enamel paint of approved quality and colour delivered from authorized local agent of the manufacturer in a sealed container; surface preparation including cleaning, drying, making free from dirt, grease, wax, removing all chalked and scaled materials, fungus (if required must be treated with fungicidal solution) flaking paints, washing the surface with soap water/caustic soda, mending good the surface defects, smoothening the surface by putty, sand papering the surface; applying to concrete surfaces and walls in three coats by brush/roller/spray etc. upto desired finishing;elapsing specified time for drying and re-coating; with necessary scaffolding all complete in all floors and accepted by the Engineer-in-charge.	sqm	470.00	467.00	452.00	452.00
16.8	Silicon based water repellent of approved quality delivered from authorized local agent of the manufacturer in a sealed container; surface preparation including cleaning, drying, making free from dirt, grease, wax, removing all chalked and scaled materials, fungus, mending good the surface defects using sand paper and necessary scaffolding; applying 3 coats of silicon based water repellent on exposed brick surface/fair face surface spreading by brush/roller/spray & necessary scaffolding etc. upto desired finishing, elapsing specified time for drying or recoating; all complete in all floors and accepted by the Engineer in-charge.	sqm	260.00	258.00	246.00	246.00

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Item No.	Description of Item	Unit	Unit Rate of Railway Division In Taka			
			Dhaka	Chattogram	Paksey	Lalmonirhat
16.9	French polishing to door and window frames and shutter by three coats over a coat of priming including putty, cleaning, finishing and polishing with sand paper etc. all complete in all floors and accepted by the Engineer-in-charge.	sqm	430.00	427.00	405.00	405.00
16.10	Wood varnishing of approved quality and colour delivered from authorized local agent of the manufacturer in a sealed container using brand specified thinner to door and window frame and shutter in three coats, applied with brush including cleaning oil, grease, dirt, making dry, sand papering, if required washing with weak detergent solution, stripping out the colour straps, finishing the surface, etc. all complete in all floors and accepted by the Engineer-in-charge.					
16.10.1	Yacht	sqm	208.00	206.00	196.00	196.00
16.10.2	Egg-shell	sqm	210.00	209.00	198.00	198.00
16.10.3	Matt	sqm	211.00	209.00	199.00	199.00
16.11	Approved best quality and colour synthetic polyvinyl distemper delivered from authorized local agent of the manufacturer in a sealed container, applying to wall and ceiling with surface preparation including cleaning drying, making free from dirt, grease, wax, removing all chalked and scaled materials, fungus, mending good the surface defects using sand paper and necessary scaffolding; applying 1 coat of interior sealer of specified brand on prepared surface; then applying 1 coat of interior putty of specified brand for levelling, spot filling, crack filling and cutting by sand paper/zero water paper; finally applying 2 coats of synthetic polyvinyl distemper spreading by brush/roller/spray & necessary scaffolding etc. upto desired finishing, elapsing specified time for drying or recoating; all complete in all floors and accepted by the Engineer-in-charge.	sqm	238.00	237.00	225.00	225.00

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Item No.	Description of Item	Unit	Unit Rate of Railway Division In Taka			
			Dhaka	Chattogram	Paksey	Lalmonirhat
16.12	White washing by three coats, lime mixture prepared at least 12 hours before use, slacking stone lime, supplying of gums, blue, stirring thoroughly, removing the floating materials from the mixer, surface cleaning to free from all foreign materials before application of each coat, applying one vertical and one horizontal wash for each coat and successive coat is to be applied after drying up of previous coat including hair brass, providing necessary scaffolding and cleaning plinth, floors, doors, windows, portions and ventilators by washing, rubbing, oiling if necessary after white wash for all floors including cost of water, electricity and other charges etc. complete in all respect in all floors and accepted by the Engineer-in-charge.	sqm	25.00	25.00	24.00	24.00
16.13	Colour wash with yellow orchard/any other colour pigment by two coats over a prime coat of white wash, lime mixture prepared at least 12 hours before use, slacking stone lime, supplying of gums, blue, stirring thoroughly, removing the floating materials from the mixer, surface cleaning to free from all foreign materials before application of each coat, applying one vertical and one horizontal wash for each coat and successive coat is to be applied after drying up of previous coat including hair brass, providing necessary scaffolding and cleaning plinth, floors, doors, windows, portions and ventilators by washing, rubbing, oiling if necessary after white wash for all floors including cost of water, electricity and other charges etc. complete in all respect in all floors and accepted by the Engineer-in-charge.	sqm	30.00	30.00	29.00	29.00







Item No.	Description of Item	Unit	Unit Rate of Railway Division In Taka			
			Dhaka	Chattogram	Paksey	Lalmonirhat
16.14	Application of 02 coats of self leveling epoxy compound (4 mm thick) as base coat & finishing coat over a single layer of screet coat (primer) for making smooth floor surface; all chemicals delivered from authorized local agent of the manufacturer in sealed container; materials having high water resistance, high bondability, flexibility property; applying by applicator machine after being mixed by force action mixer elapsing time for drying; surface preparation including surface cleaning from dust, oil or dirt, preparing underlying surface having minimum moisture content, smoothening, finishing & polishing by grinding machine & necessary tools, repairing significant ups/downs in floor before application with sacaffolding, testing charges etc. all complete in all floors approved & accepted by the Engineer-in-charge.	sqm	2323.00	2320.00	2306.00	2306.00
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