

■ Design Check List (No.1~125) No.32 20240829

100 items are mandatory (white cells).
25 items are sampling (green cells ★ marked).

| | | |
|---------------|------|------|
| Building Name | | |
| Site Location | | |
| Engineer | Name | Date |
| RAJUK | Name | Date |
| | Name | Date |
| | Name | Date |
| | Name | Date |

| 1 | | 2 | | Cells filled out by RAJUK/designers | | | | | Reference | | | | | | |
|-----------------------------|-----|---|-------------------------------------|-------------------------------------|---|--|--|-----------------------|-----------------------|-----------------------|--------------------------------|-----------------|----------|---------|--|
| Element | No. | Item | confirm | not confirm | Describe the Contents of the Confirmation | Data source page or No. | | Data source | | | BNBC2020 Part VI | Manual page | URP P-S | Remarks | |
| | | | | | | D:Design Report A:Architectural Drawing S:Structural Drawing | | DESIGN REPORT | Architectural DRAWING | Structural DRAWING | | | | | |
| Building overview | 1 | Building occupancy type →Describe what you checked. ex) Residential building | <input checked="" type="checkbox"/> | <input type="checkbox"/> | Residential building | D-7 | | <input type="radio"/> | | | Sec 1.2.3 Table6.1.1 | Annex (1) | - | | |
| | 2 | Total floor area →Describe it. ex) 4353.41m ² | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 4353.41m ² | A-01 | | <input type="radio"/> | <input type="radio"/> | | - | - | - | | |
| | 3 | Ground floor area →Describe it. ex) 527.03m ² | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 527.03m ² | A-01 | | <input type="radio"/> | <input type="radio"/> | | - | - | - | | |
| | 4 | Type of Structure →Describe it. ex) RCC, Steel | <input checked="" type="checkbox"/> | <input type="checkbox"/> | RC | D-7, 9 S-G02 1-d) | | <input type="radio"/> | | <input type="radio"/> | | - | - | - | |
| | 5 | Number of stories →Describe it. ex) 10 stories and 1 base | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 10 stories and 1 base | D-7 A-01, 18 | | <input type="radio"/> | <input type="radio"/> | | | - | - | - | |
| | 6 | Building Height →Describe it. ex) 34.5m | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 34.5m | D-7, 18 A-14 | | <input type="radio"/> | <input type="radio"/> | | | - | - | - | |
| Declaration | 7 | Declaration of the designer (responsibility for the design) →Write designer's name. ex) A.K.M Saiful Bari | <input checked="" type="checkbox"/> | <input type="checkbox"/> | A. K. M Saiful Bari | D-1, 2 | | <input type="radio"/> | | | Sec. 1.9.2(h) | Chapter1 1.4 | - | | |
| Codes and Standards | 8 | Codes and Standards →Describe it. ex) BNBC2020 | <input checked="" type="checkbox"/> | <input type="checkbox"/> | BNBC2020 | D-8 S-G02 1-a) | | <input type="radio"/> | | <input type="radio"/> | Sec. 1.9.2(a), (b) | - | - | | |
| Design method | 9 | Design method →Describe it. ex) USD, WSD | <input checked="" type="checkbox"/> | <input type="checkbox"/> | Strength design | D-19 S-G02 1-f) | | <input type="radio"/> | | <input type="radio"/> | Sec. 1.9.2(c) | - | - | | |
| Earthquake Analysis methods | 10 | Earthquake Analysis methods →Describe it. ex) Equivalent static analysis | <input checked="" type="checkbox"/> | <input type="checkbox"/> | Equivalent static analysis | D-21 S-G02 1-b) | | <input type="radio"/> | | <input type="radio"/> | Sec 2.5.7- 2.5.12 | - | - | | |
| Software | 11 | Design software Name →Describe it. ex) ETABS v16.2.1 | <input checked="" type="checkbox"/> | <input type="checkbox"/> | ETABS v16.2.1 | D-21 | | <input type="radio"/> | | | Sec. 1.9.2(i) | Chapter1 1.4 | - | | |
| Soil Properties | 12 | Soil report Confirmation. →Describe the site. Ex) Basundhara R/A, Dhaka | <input checked="" type="checkbox"/> | <input type="checkbox"/> | Basundhara R/A, Dhaka | D-15, 20 | | <input type="radio"/> | | | Sec. 1.9.2(g) Sec. 2.5.3 | Annex (4) | 118, 123 | | |
| | 13 | Vs: Average Shear Wave Velocity →Describe it. ex) Vs=108.38<180 (m/s) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | Vs=108.38<180m/s | D-15 Soil Report | | <input type="radio"/> | | | Sec. 2.5.3.2 Table6.2.13 | Annex (3) | 118 | | |
| | 14 | N: Average SPT value in top 30m →Describe it. ex) N=2.67<15 (blows/30cm) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | N=2.67<15m/s | D-15 Soil Report | | <input type="radio"/> | | | Sec. 2.5.3.2 Table6.2.13 | Annex (3) | 118 | | |
| | 15 | Su: Average Undrained shear Strength →Describe it. ex) No description (non-cohesive layer) | <input type="checkbox"/> | <input checked="" type="checkbox"/> | No description | D-15 Soil Report | | <input type="radio"/> | | | Sec. 2.5.3.2 Table6.2.13 | Annex (3) | 118 | | |
| Site Conditions | 16 | S: Site Class based on Soil properties is selected according to Table6.2.13. →Describe it. ex) SD | <input checked="" type="checkbox"/> | <input type="checkbox"/> | SD | D-15 | | <input type="radio"/> | | | Sec 2.5.3.2 Table6.2.13 | Annex (3) | 118 | | |
| | 17 | Occupancy category is selected according to Table6.1.1. →Describe it. ex) II | <input checked="" type="checkbox"/> | <input type="checkbox"/> | II | D-15, 18 | | <input type="radio"/> | | | Sec 1.2.3 Table6.1.1 | Annex (1) | - | | |
| | 18 | Seismic Zone is selected according to Figure6.2.24. →Describe it. ex) 2 | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 2 | D-15 S-G02 2-c) | | <input type="radio"/> | | <input type="radio"/> | Sec 2.5.4.2 Figure 6.2.24 | Annex (2) | 117 | | |
| | 19 | SDC: Seismic Design Category is selected according to Table6.2.18. →Describe it. ex) D | <input checked="" type="checkbox"/> | <input type="checkbox"/> | D | D-15 | | <input type="radio"/> | | | Sec 2.5.5.2 Table6.2.18 | Annex (4) | 122 | | |
| | 20 | Seismic Zone Coefficient "Z" is selected according to Table6.2.14, 6.2.15. →Describe it. ex) 0.2 | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 0.2 | D-15, 18 | | <input type="radio"/> | | | Sec 2.5.4.2 Table6.2.14, 15 | Annex (2) | 117 | | |
| | 21 | I: Importance factor is selected according to Table 6.2.17. →Describe it. ex) 1.00 | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 1.00 | D-15, 18 | | <input type="radio"/> | | | Sec 2.5.5.1 Table6.2.17 | - | 119 | | |

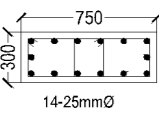
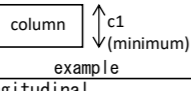
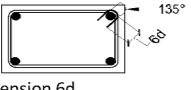
The entry in the red box above is an example.

| Element | No. | Item | confirm | not confirm | Describe the Contents of the Confirmation | Data source page or No. | | Data source | | | BNBC2020 Part VI | Manual page | URP P-S | Remarks |
|-------------------------|--|--|-------------------------------------|--------------------------|--|--|--------------------------|--------------------------|--------------------------|--------------------------|--|-------------|----------|---------|
| | | | | | | D:Design Report A:Architectural Drawing S:Structural Drawing | | DESIGN REPORT | Architectural DRAWING | Structural DRAWING | | | | |
| Loads etc. | 22 | Total Dead Load →Describe it. ex) 53041.2kN | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 53041.2kN | D-15 | | <input type="checkbox"/> | | | Sec 2.2 | - | 96 | |
| | 23 | Total Live Load →Describe it. ex) 9484.0kN | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 9484.0kN | D-15 | | <input type="checkbox"/> | | | Sec 2.3 | - | 99-105 | |
| | 24 | W : Seismic weight W=Dead Load+Live Load× (25%, 50%, 100%, or higher) →Describe it. ex) W=55412.25kN | <input checked="" type="checkbox"/> | <input type="checkbox"/> | W=55412.25kN | D-15 | | <input type="checkbox"/> | | | Sec 2.5.7.3 | - | - | |
| | 25 | T(s) : Building period →Describe it. ex) T=0.694678957 | <input checked="" type="checkbox"/> | <input type="checkbox"/> | T=0.694678957 | D-18 | | <input type="checkbox"/> | | | Sec 2.5.7.2 | - | 128 | |
| | 26 | Cs : Normalized acceleration response spectrum →Describe it. ex) Cs=3.375 | <input checked="" type="checkbox"/> | <input type="checkbox"/> | Cs=3.375 | D-15 | | <input type="checkbox"/> | | | Sec 2.5.4.3 | - | 121 | |
| | 27 | Sa : Design spectral acceleration. Sa=2/3×ZI/R×Cs →Describe it. ex) Sa=0.069 | <input checked="" type="checkbox"/> | <input type="checkbox"/> | Sa=0.069 | D-15 | | <input type="checkbox"/> | | | Sec 2.5.4.3 | - | 121 | |
| | 28 | V : Design base shear. V=Sa·W →Describe it. ex) V=3823.5kN | <input checked="" type="checkbox"/> | <input type="checkbox"/> | V=3823.5kN | D-15 | | <input type="checkbox"/> | | | Sec 2.5.7.1 | - | - | |
| | 29 | Basic Wind Speed →Describe it. ex) 65.7m/s (=236.5km/h=146.9mph) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 65.7m/s | D-13 S-G02 2-b) | | <input type="checkbox"/> | | <input type="checkbox"/> | Sec 2.4.4 Table6.2.8 | - | 138 | |
| | 30 | Importance Factor (Table 6.2.9) →Describe it. ex) 1 | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 1 | D-13 | | <input type="checkbox"/> | | | Sec 2.4.5 Table6.2.9 | - | 139 | |
| 31 | Gust Effect Factor →Describe it. ex) 0.85 If building period greater than 1.0 second, the Gust Effect Factor shall be calculated. | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 0.85 | D-13 | | <input type="checkbox"/> | | | Sec 2.4.8 | - | 158 | | |
| Structural System | 32 | Seismic Force-Resisting System is selected according to Table 6.2.19. →Describe it. ex) DUAL SYSTEMS (IMF) E2 Special reinforced concrete shear walls | <input checked="" type="checkbox"/> | <input type="checkbox"/> | E2:Special reinforced concrete shear walls | D-7, 18 S-G02 1-b) | | <input type="checkbox"/> | | <input type="checkbox"/> | Sec 2.5.5.4 Table 6.2.19 | Annex (5) | 120, 124 | |
| | 33 | The type of Moment Resisting Frame (SMF, IMF, or OMF) →Describe it. ex) IMF | <input checked="" type="checkbox"/> | <input type="checkbox"/> | IMF | D-7 S-G02 1-b) | | <input type="checkbox"/> | | <input type="checkbox"/> | SMF: Sec. 8.3.3-8 IMF: Sec. 8.3.10 OMF: Sec. 8.3.9 | Annex (6) | - | |
| | 34 | R : Response Reduction Factor is selected according to Table 6.2.19. →Describe it. ex) R=6.5 | <input checked="" type="checkbox"/> | <input type="checkbox"/> | R=6.5 | D-18 | | <input type="checkbox"/> | | | Sec 2.5.5.4 Table 6.2.19 | Annex (5) | 120, 124 | |
| | 35 | Cd : Deflection Amplification Factor is selected according to Table 6.2.19. →Describe it. ex) Cd=5 | <input checked="" type="checkbox"/> | <input type="checkbox"/> | Cd=5 | D-18 | | <input type="checkbox"/> | | | Sec 2.5.5.4 Table 6.2.19 | Annex (5) | 120, 124 | |
| | 36 | Height limit is selected according to Table 6.2.19. →Describe it. ex) 50m | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 50m | D-7 | | <input type="checkbox"/> | | | Sec 2.5.5.4 Table 6.2.19 | Annex (5) | 120, 124 | |
| | 37 | ★Building height is lower than the height limit above. | <input checked="" type="checkbox"/> | | Satisfactory | | | | | | Sec 2.5.5.4 Table 6.2.19 | Annex (5) | 120, 124 | |
| Building Irregularities | 38 | Vertical Stiffness Irregularity check (mentioned/not) Soft story occurs when lateral stiffness is less than 70% of that in the the story above. | <input checked="" type="checkbox"/> | <input type="checkbox"/> | - | D-49 | | <input type="checkbox"/> | | | Sec 2.5.5.3.2 (i) | - | 126 | |
| | 39 | Horizontal (a)Torsional Irregularity check (mentioned/not) Irregular : $\Delta_{max}/\Delta_{ave} > 1.2$ Extreme : $\Delta_{max}/\Delta_{ave} > 1.4$ | <input checked="" type="checkbox"/> | <input type="checkbox"/> | - | D-44 | | <input type="checkbox"/> | | | Sec 2.5.5.3.1 (i) | - | 126 | |
| | 40 | Drift check Storey drift →As a representative, describe the maximum value of the X-direction (positive force). ex) 0.003139 (6F) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 0.003139 (6F) | D-47 | | <input type="checkbox"/> | | | Sec 2.5.14.1 Table.6.2.21 | - | 136 | |
| | 41 | ★The maximum storey drift above is lower than the value of Table 6.2.21 (ex. lower than 0.020hsx). hsx is the story height below level x. | <input checked="" type="checkbox"/> | | Satisfactory | | | | | | Sec 2.5.14.1 Table.6.2.21 | - | 136 | |
| | 42 | (b)Reentrant Corner check (A/L > 0.15) (mentioned/not) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | - | D-51 | | <input type="checkbox"/> | | | Sec 2.5.5.3.1 (ii) | - | 126 | |
| 43 | (c)Diaphragm discontinuity check (mentioned/not) Irregular : $A_{axn} (= \text{cutout or open areas}) > 1/2XY (= 50 \text{ percent of the gross enclosed area of the diaphragm})$ | <input checked="" type="checkbox"/> | <input type="checkbox"/> | - | D-51 | | <input type="checkbox"/> | | | Sec 2.5.5.3.1 (iii) | - | 126 | | |
| Concreting Procedure | 44 | Concrete Maximum permissible free fall height of concrete depositing/pouring →Describe it. ex) 1.5m | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 1.5m | S-G06 | | | <input type="checkbox"/> | | Sec 5.10 or Indian Standard IS-456:2000 | - | - | |
| | 45 | ★The maximum free fall height above is lower than 1.5m (lower is better). | <input checked="" type="checkbox"/> | | Satisfactory | | | | | | Sec 5.10 or Indian Standard IS-456:2000 | - | - | |
| | 46 | A compaction method such as using mechanical vibrators | <input checked="" type="checkbox"/> | <input type="checkbox"/> | - | S-G06 | | | <input type="checkbox"/> | | Sec 5.10 or Indian Standard IS-456:2000 | - | - | |
| | 47 | Precautions for form work such as follow PWD schedule | <input checked="" type="checkbox"/> | <input type="checkbox"/> | - | S-G06 | | | <input type="checkbox"/> | | Sec 5.16 | - | - | |

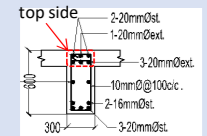
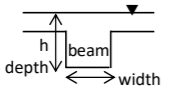
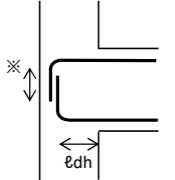
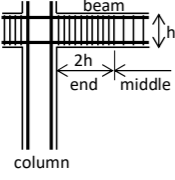
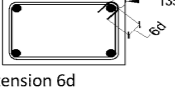
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|-----------------------------------|------------|-------------------------------------|-------------------------------------|--------------------------|--|--|---------------|--------------------------|--|---------------------------------------|----------------------------------|---------|
| | | | | | | D:Design Report A:Architectural Drawing S:Structural Drawing | DESIGN REPORT | Architectural DRAWING | | | | |
| Curing (days) | 48 | Column/Beam/Shear wall/Slab | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 21 days | S-G06 | | | | | | |
| | 49 | | <input checked="" type="checkbox"/> | | Satisfactory | | | | Sec 5.11 | - | - | |
| Cover | 50 | Column/Beam/Shear wall/Slab | <input checked="" type="checkbox"/> | <input type="checkbox"/> | - | D-9 S-G05 | | | Sec. 8.1.7 | - | 8, 12 17, 63 | |
| Concrete | 51 | classification | <input checked="" type="checkbox"/> | <input type="checkbox"/> | - | S-G02 | | | Sec. 5.1.1 | - | - | |
| Concrete Compressive Strength f'c | 52 | | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 31N/mm ² | D-9 | | | | | | |
| | 53 | Column | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 31N/mm ² | S-G02 | | | | | | |
| | 54 | | <input checked="" type="checkbox"/> | | Satisfactory | | | | | | | |
| | 55 | Beam | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 24.13N/mm ² | D-9 S-G02 | | | Sec 5.5.4 Sec 8.1.7.8 Sec 8.3.3.3 | Annex (6) A-8, 11, 17 | 64, 67 73, 84 | |
| | 56 | Shear Wall | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 31N/mm ² | D-9 S-G02, S-S16 | | | | | | |
| | 57 | Slab | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 24.13N/mm ² | D-9 S-G02 | | | | | | |
| | 58 | | <input checked="" type="checkbox"/> | | Satisfactory | | | | | | | |
| | 59 | | <input checked="" type="checkbox"/> | <input type="checkbox"/> | pile=21N/mm ² pile cap=31N/mm ² | pile:D-9, S-S04 pile cap:S-G02 | | | | | | |
| 60 | Foundation | <input checked="" type="checkbox"/> | <input type="checkbox"/> | cast in situ pile | S-S04 | | | Sec 3.6.1 Table 6.3.5 | - | 67 | | |
| 61 | | <input checked="" type="checkbox"/> | | Satisfactory | | | | | | | | |
| Steel yield Strength | 62 | fy (longitudinal rebar) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | fy=414N/mm ² | D-9 S-G02 | | | Sec 6.2.4 Sec 8.3.3.4(b) | Annex (6) A-11, 17 | 68, 74, 85 | |
| | 63 | | <input checked="" type="checkbox"/> | | Satisfactory | | | | | | | |
| | 64 | fyt (transverse rebar) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | fyt=414N/mm ² | D-9 S-G02 | | | Sec 6.2.4 Sec 8.3.3.4(c) | Annex (6) A-11, 17 | 68, 74, 85 | |
| | 65 | | <input checked="" type="checkbox"/> | | Satisfactory | | | | | | | |
| Lap splices | 66 | Column | <input checked="" type="checkbox"/> | <input type="checkbox"/> | - | S-G04, S-G06 | | | Sec 8.2.3 Sec 8.2.12.2 Sec 8.3.4.2 Sec 8.3.5.3 Sec 8.3.5.4 Sec 8.3.10.5 | Annex (6) A-7, 8, 13 20, 22, 23 | 65, 66 69, 75 76, 81 82 | |
| | 67 | Beam | <input checked="" type="checkbox"/> | <input type="checkbox"/> | - | S-G04, S-G06 | | | | | | |

The entry in the red box above is an example.

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|--|-----|---|---|-------------------------------------|---|---|--------------------------|--------------------------|--------------------------|---|---------------------------|-------------|---------|--------|--|
| | | | | | | | DESIGN REPORT | Architectural DRAWING | Structural DRAWING | | | | | | |
| Column  ex) Schedule | 68 | design | Columns are designed in the design report. (mentioned/not) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | - | D-54-56 | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | - | - | - | | |
| | 69 | symbol | Select one of the column symbols designed in the design report and describe it (any of them). ex) 【3F/C2】 | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 【3F/C2】 | D-54-56 | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | - | - | - | | |
| | 70 | Schedule | column schedule above in the structural drawing. The following is a review of this column. | <input checked="" type="checkbox"/> | <input type="checkbox"/> | - | S-S14 | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | - | - | - | | |
| | 71 | Cross-sectional shape | Dimension of section of column above →describe the dimension. ex) 300mm×750mm | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 300mm×750mm | S-S14 | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | - | - | - | | |
| | 72 | | ★Confirm below ・c1 ≥ 300mm ・c2 ≥ c1×2.5  | <input checked="" type="checkbox"/> | <input type="checkbox"/> | Satisfactory | - | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Sec 8.3.5.1 Fig 6.8.6 | - | - | | |
| | 73 | longitudinal rebar | Required reinforcement ratio of column above from computer output →Describe it. ex) 3.06% | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 3.06% | D-56 | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | output | Sec 6.3.9.1 | - | 23.69 | |
| | 74 | | longitudinal rebars of column above from structural drawing are over 4. →Describe the number of longitudinal rebars & diameter (φ). ex) 14-25φ | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 14-25φ | S-S14 | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Sec 6.3.9.2 | - | 24.69 | |
| | 75 | | Calculate the total cross-sectional area of longitudinal rebar above from structural drawing (Nominal cross-sectional area : 16φ=201mm ² , 20φ=314mm ² , 22φ=380mm ² , 25φ=491mm ²) →Describe it. ex) 14×491=6874mm ² | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 14×491=6874mm ² | - | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | - | - | - | |
| | 76 | | Provided reinforcement ratio of column(=Rebar area/column cross-sectional area) above from structural drawing →Describe it. ex) 6874/(300×750)×100=3.06% | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 6874/(300×750)×100=3.06% | - | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Sec 6.3.9.1 | - | 23.69 | |
| | 77 | | ★Confirm the consistency of reinforcement ratio of column (%) between computer output and structural drawing. ・Required (%) = Provided (%) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | Satisfactory | - | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | - | - | - | |
| | 78 | | ★Ast satisfies the following. 0.01Ag ≤ Ast ≤ 0.06Ag or 0.04Ag※ (※preferred not to exceed 0.04Ag) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | Satisfactory | - | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Sec 6.3.9.1 | - | 69 | |
| | 79 | | Capacity ratio of column above. | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 0.808 | D-57-62 | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | - | - | 69 | |
| | 80 | | ★Capacity ratio is confirm below. Capacity ratio ≤ 1.0 | <input checked="" type="checkbox"/> | <input type="checkbox"/> | Satisfactory | - | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | - | - | 69 | |
| | 81 | hoop/tie | Diameter of hoop/tie →Describe it. ex) 10φ | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 10φ | S-S14a | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | - | - | 69 | |
| | 82 | | Spacing of the end (EO) area →Describe it. ex) 125mm | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 125mm | S-S14a | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | - | - | 69 | |
| | 83 | | Spacing of the middle area →Describe it. ex) 200mm | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 200mm | S-S14a | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | - | - | 69, 82 | |
| | 84 | | Spacing of the beam-column joint →Describe the pitch. ex) 125mm (Check if there is a reinforcement drawing of this.) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 125mm | S-S14a, S17a | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | - | - | 62, 69 | |
| 85 | | Note: Transverse reinforcement of beam not shown for clarity a 135° bend plus an Extension at the free end of the bar  Extension 6d ■hoop/tie ≥60mm (OMF) ≥75mm (IMF, SMF) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | Satisfactory | - | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | OMF: Sec 8.3.9 IMF: Sec 8.3.10.5 (c) SMF: Sec 8.3.5.4 | Annex (6) A-10, 13, 23 | - | | | |

The entry in the red box above is an example.

| Element | No. | Item | confirm | not confirm | Describe the Contents of the Confirmation | Data source page or No. | | | BNBC2020 Part VI | Manual page | URP P-S | Remarks | | | |
|---|-----|--|---|-------------------------------------|---|--|-------------------|-----------------------|------------------|-------------|---|---------------------------|---------------------|------------|----|
| | | | | | | D:Design Report A:Architectural Drawing S:Structural Drawing | DESIGN REPORT | Architectural DRAWING | | | | | Structural DRAWING | | |
| <p>Beam</p>  <p>ex) Schedule</p>     <p>Note: Transverse reinforcement of column not shown for clarity</p> <p>Note: Transverse reinforcement of column not shown for clarity</p> <p>a 135° bend plus an Extension at the free end of the bar</p> <p>Extension 6d</p> <p>■ stirrup ≥75mm (OMF, IMF, SMF)</p> | 86 | design | Beams are designed in the design report. | <input checked="" type="checkbox"/> | <input type="checkbox"/> | - | D-71-94 | | | | - | - | - | | |
| | 87 | symbol | Select one of the beam symbols designed in the design report and describe it (any of them). ex) 【Story3&4/F.B-1】 | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 【Story3&4/F.B 1】 | D-84, 85, 94 | | | | - | - | - | | |
| | 88 | Schedule | Beam schedule above in the structural drawing. The following is a review of this beam. | <input checked="" type="checkbox"/> | <input type="checkbox"/> | - | S-S53, S57 | | | | | - | - | - | |
| | 89 | Cross-sectional shape | Dimension of section of beam above mentioned. →describe the length. ex) 300mm×600mm | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 300mm×600mm | D-9 S-S53, S57 | | | | | - | - | - | |
| | 90 | | ★Confirm below (h is depth of beam) · width ≥ {0.3h, 250mm} | <input checked="" type="checkbox"/> | | Satisfactory | | | | | | Sec 8.3.4.1 Fig 6.8.1 | - | - | |
| | 91 | longitudinal rebar | Required area of longitudinal rebar above from computer output (top side of the end of the beam) →describe it. ex) 962mm ² | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 962mm ² | D-85, 94 | | | output | | - | - | 69 | |
| | 92 | | Diameter and number of longitudinal rebar above from structural drawing (top side of the end of the beam). →describe it. ex) 6-20φ | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 6-20φ | S-S57 | | | | | - | - | 69 | |
| | 93 | | Calculate the provided area of longitudinal rebar above from structural drawing. (Nominal cross-sectional area : 16φ=201mm ² , 20φ=314mm ² , 22φ=380mm ² , 25φ=491mm ²) →describe it. ex) 6×314=1884mm ² | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 6×314=1884mm ² | D-85, 94 S-S57 | | | | | - | - | 69 | |
| | 94 | | ★Confirm below · required area ≤ provided area | <input checked="" type="checkbox"/> | | Satisfactory | | | | | | - | - | 69 | |
| | 95 | development length extension | Development length (ℓ _{dh}) →describe it. Ex) 185mm | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 185mm | S-S57 | | | | | | | | |
| | 96 | | ★Confirm below. (db is diameter of longitudinal rebar.) · OMF doesn't have a specific stipulation (follow IMF). · IMF : ℓ _{dh} ≥ {8db, 150mm, 0.24fydb/√f'c} · SMF : ℓ _{dh} ≥ {8db, 150mm, fydb/5.4√f'c} | <input checked="" type="checkbox"/> | | Satisfactory | | | | | | Sec 8.2.6 Sec 8.3.7.4 | Annex (6) A-7, 8 | 65, 72 | |
| | 97 | | Extension (※ mark length on the left side figure) →describe it. ex) 300mm | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 300mm | S-S57 | | | | | | | | |
| | 98 | | ★Confirm below. (db is diameter of longitudinal rebar.) · Extension ≥ 12db | <input checked="" type="checkbox"/> | | Satisfactory | | | | | | Sec 8.1.2.1 | Annex (6) A-6 | 62, 72 | |
| | 99 | stirrup | Diameter of stirrup →Describe it. ex) 10φ | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 10φ | S-S57 | | | | | | - | - | 69 |
| 100 | | Spacing of the end (2h) area →describe it. ex) 100mm | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 100mm | S-S57 | | | | | | | | 69 | |
| 101 | | Spacing of the middle area →Describe it. ex) 100mm | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 100mm | S-S57 | | | | | | | | 69, 77, 78 | |
| 102 | | ★Confirm below. (d=h-60mm) · OMF doesn't have a specific stipulation (follow IMF). [IMF, SMF] Spacing of end area ≤ d/4, 8 times of diameter of longitudinal rebar, 24 times of diameter of stirrup, 300mm Spacing of middle area ≤ d/2 [Extension of 135° hook/bend] More than 6 times the stirrup diameter and 75mm (for OMF, IMF, SMF). | <input checked="" type="checkbox"/> | | Satisfactory | | | | | | OMF: Sec 8.3.9 IMF: Sec 8.3.10.4 (b) SMF: Sec 8.3.4.3 | Annex (6) A-10, 12, 21 | 69 | | |

The entry in the red box above is an example.

| Element | No. | Item | confirm | not confirm | Describe the Contents of the Confirmation | Data source page or No. | | | BNBC2020 Part VI | Manual page | URP P-S | Remarks | | |
|--|--|---|--|--|---|--|----------------------------------|--------------------------|--------------------------|--------------------------|--------------------------|----------------------------|--------------------|------------|
| | | | | | | D:Design Report A:Architectural Drawing S:Structural Drawing | DESIGN REPORT | Architectural DRAWING | | | | | Structural DRAWING | |
| Shear Wall  ex) Schedule | 103 | design | Shear walls are designed in the design report. | <input checked="" type="checkbox"/> | <input type="checkbox"/> | - | D-63-70 | <input type="checkbox"/> | | | - | - | - | |
| | 104 | symbol | Select one of the shear wall symbols designed in the design report and describe it (any of them). ex) [Story1/SW-3] | <input checked="" type="checkbox"/> | <input type="checkbox"/> | [story1/SW-3] | D-68, 70 | <input type="checkbox"/> | | | - | - | - | |
| | 105 | Schedule | Shear wall schedule above in the structural drawing. The following is a review of this shear wall. | <input checked="" type="checkbox"/> | <input type="checkbox"/> | - | S-S16 | | | <input type="checkbox"/> | | - | - | - |
| | 106 | thickness | Thickness of section of shear wall above →describe the thickness. ex) 300mm | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 300mm | S-S16 | | | <input type="checkbox"/> | | - | - | - |
| | 107 |  | Vertical reinforcement | Thickness of section of shear wall above →describe the thickness. ex) 300mm ★Confirm below thickness ≥ h/25 and 100mm (h=supported height or length) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | Satisfactory | | | | | Sec 6.6.5.3 | - | 30 |
| | 108 | Vertical reinforcement | Diameter and spacing/number of the vertical reinforcement →describe it. ex) 2-20φ-@120 (If the number is displayed (such as the left side schedule), the spacing is estimated from the drawing.) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 2-20φ-@120 | S-S16 | | | <input type="checkbox"/> | | - | - | 69 |
| | 109 | | ★Confirm below • Walls with a thickness of 250 mm or more are two layers reinforcement. • Maximum spacing of reinforcement shall not be spaced farther apart than three times the wall thickness, nor farther apart than 450 mm. | <input checked="" type="checkbox"/> | <input type="checkbox"/> | Satisfactory | | | | | | Sec 6.6.3.4 Sec 6.6.3.5 | - | 35, 36, 69 |
| | 110 | | Computer output of required area of vertical reinforcement above →describe it. ex) 4303mm ² | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 4303mm ² | D-70 | <input type="checkbox"/> | output | | | - | - | 69 |
| | 111 | | Calculate the actual provided area of vertical reinforcement above. →describe it. ex) 28 × 314=8792mm ² | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 28 × 314=8792mm ² | D-70 S-S16 | | | <input type="checkbox"/> | | - | - | 69 |
| | 112 | | ★Confirm below • required area ≤ provided area | <input checked="" type="checkbox"/> | <input type="checkbox"/> | Satisfactory | | | | | | - | - | 69 |
| | 113 | Horizontal reinforcement | Diameter and spacing of the horizontal reinforcement →describe it. ex) 2-12φ-@75 | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 2-12φ-@75 | S-S16 | | | <input type="checkbox"/> | | - | - | 69 |
| | 114 | | ★Confirm below • Walls with a thickness of 250 mm or more are two layers reinforcement. • Maximum spacing of reinforcement shall not be spaced farther apart than three times the wall thickness, nor farther apart than 450 mm. | <input checked="" type="checkbox"/> | <input type="checkbox"/> | Satisfactory | | | | | | Sec 6.6.3.4 Sec 6.6.3.5 | - | 33, 36, 69 |
| | Slab  ex) Schedule | 115 | Type | The type of slab →Describe it. ex) Beam supported cast in situ slab | <input checked="" type="checkbox"/> | <input type="checkbox"/> | Beam supported cast in situ slab | D-7, 95 | <input type="checkbox"/> | | | Sec 6.5 | - | - |
| | | 116 | Schedule | Slab schedule in the structural drawing. The following is a review of this slab. | <input checked="" type="checkbox"/> | <input type="checkbox"/> | - | S-S51 | | | <input type="checkbox"/> | | - | - |
| 117 | | symbol | Select one of the slab symbols in the structural drawings and describe it (any of them). ex) [1st floor] | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 1st Floor | S-S51 | | | <input type="checkbox"/> | | - | - | - |
| 118 | | thickness | Thickness of the slab above →describe it. ex) 125mm | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 125mm | D-95 S-S51 | <input type="checkbox"/> | | <input type="checkbox"/> | | Sec 6.2.5 | - | 41, 50, 51 |
| 119 | | | ★Confirm below • thickness ≥ 125mm | <input checked="" type="checkbox"/> | <input type="checkbox"/> | Satisfactory | | | | | | - | - | - |
| Foundation  ex) Schedule | 120 | Type | The type of foundation →Describe it. ex) pile foundation | <input checked="" type="checkbox"/> | <input type="checkbox"/> | pile foundation | D-7 S-S04 | <input type="checkbox"/> | | <input type="checkbox"/> | Sec 3.7 | - | - | |
| | 121 | Schedule | Footing or Pilecap schedule in the structural drawings. The following is a review of this foundation. | <input checked="" type="checkbox"/> | <input type="checkbox"/> | - | S-S06 | | | <input type="checkbox"/> | | - | - | - |
| | 122 | symbol | Select one of the foundation symbols in the structural drawings and describe it (any of them). ex) [PC-1] | <input checked="" type="checkbox"/> | <input type="checkbox"/> | [PC-1] | S-S06 | | | <input type="checkbox"/> | | - | - | - |
| | 123 | shape | Depth of footing above →describe it. ex) 550mm | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 550mm | S-G06 | | | <input type="checkbox"/> | | Sec 6.8.7 | - | 11, 16 |
| | 124 |  | example | ★Depth of footing is subject to the following. • depth ≥ 150mm (on soil) (Column Footing) • depth ≥ 300mm (on pile) (Pilecap) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | Satisfactory | | | | | - | - | - |
| | 125 | length of pile | Length of Pile →If applicable, describe the length of the pile. ex) 29700mm | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 29700mm | S-G04 | | | <input type="checkbox"/> | | - | - | - |
| Additional Considerations | | | <input type="checkbox"/> | <input type="checkbox"/> | | | | | | | | | | |

The entry in the red box above is an example.