

Tusuka Apparels Ltd. (Relocation)

40/5, Hazrat Shahjalal Road, Rajnagar, Sataish, Tongi, Gazipur.

(23.922301, 90.35821)

20th December 2021



- **Building Information**

1. **Building 2** is a 4-storied (G+3) reinforced concrete building.

Observations

**Prepared design report not fully comply with
BNBC**



Floor Loading

| Height (m) | Occupancy | Room Description | Area (sqm) | Live Load (kN/m ²) | Live Load (psf) |
|------------|--|---|------------|--------------------------------|-----------------|
| 2.7 | INDUSTRIAL, STORAGE & HA (Occupancy - G, H & J) | ice | 15.0 | 9.0 ⁽⁵⁾ | |
| 4.5 | | 5 Printing plant : | | | |
| | | Press room | 7.0 | 11.0 | |
| | | Composing and linotype room | 5.0 | 9.0 ⁽⁵⁾ | |
| | | Paper storage room | 12.0 | 9.0 ⁽⁵⁾ | |
| 2.7 | Workshop, factory, warehouse | 6 Motor room, fan room etc. including the weight of machinery | 7.5 | 4.5 | |
| 4.5 | | 7 Cold storage, grain storage | 15.0 | 9.0 ⁽⁵⁾ | |
| 4.5 | | 8 Storage warehouses : light | 6.0 | 4.5 | |
| 4.5 | | heavy | 12.0 | 9.0 | |
| 7.0 | | 9 Foundries | 20.0 | 12.0 | |

As per BNBC, the minimum floor live load for light storage is 6 kN/m² (125 psf). The storage in this building is designed for 4 kN/m² live loads. The building engineer is required to revise the storage live load limit based on BNBC requirement.

| Serial no. | Type | Item | Maximum Live load (psf) | Description | Legend |
|------------|-------|---------------------|-------------------------|----------------------------------|--------|
| 01 | Light | Store Room | 84 | Typical Store Room | |
| 02 | Light | Toilet | 60 | Typical Toilet for Male & Female | |
| 03 | Light | Staircase | 100 | Typical Staircase | |
| 04 | Light | Veranda | 60 | Typical Veranda | |
| 06 | Light | Molding Room | 60 | Typical Molding Room | |
| 06 | Light | Lobby | 60 | Typical Lobby | |
| 07 | Light | Accessories store | 60 | Typical Accessories store | |
| 08 | Light | Iron Section | 60 | Typical Iron Section | |
| 09 | Light | Ming Room | 60 | Typical Ming Room | |
| 10 | Light | 3D Rooms | 60 | Typical 3D Rooms | |
| 11 | Light | Cutting Section | 60 | Typical Ramp | |
| 12 | Light | Public Store | 84 | Typical Public Store | |
| 13 | Light | Rooms | 60 | Typical Rooms | |
| 14 | Light | Lift | 60 | Typical Lift | |
| 16 | Light | Merchandise Room | 60 | Typical Merchandise Room | |
| 16 | Light | Sorting section | 60 | Typical Accessories store | |
| 17 | Light | Pattern master Room | 60 | Typical Pattern master Room | |
| 18 | Light | Locks Room | 60 | Typical Locks Room | |
| 19 | Light | Finishing Section | 60 | Typical Finishing Section | |
| 20 | Light | Q.C section | 60 | Typical Q.C section | |
| 21 | Light | Waiting room | 60 | Typical Waiting room | |
| 22 | Light | Pantry | 60 | Typical Pantry | |
| 23 | Light | Maintenance Room | 60 | Typical Maintenance Room | |

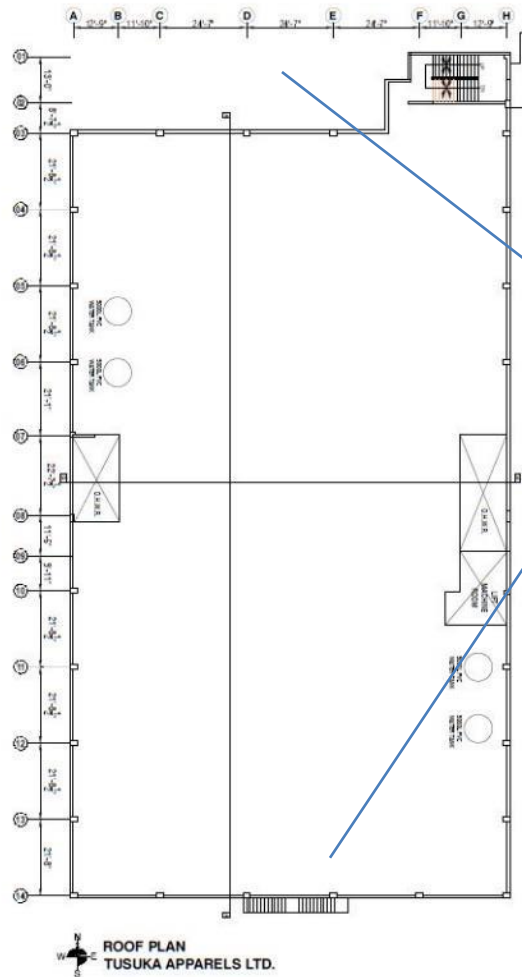
Floor loading as per design report

Signage of dampness



Signage of dampness observed in the building. Building engineer is required to identify the reason of the dampness and suggest suitable repair works.

Lack of as-built drawing of roof



No as-built drawings were available onsite for the roof. Building engineer is required to produce a as-built drawings.

Column susceptible to trolley impact



Column susceptible to trolley impact

Some of the columns were found adjacent of driveway of trolley movement. These column are susceptible to trolley impact. The factory engineer is required to take necessary measures to prevent the trolley impact by providing the barrier around the columns.

Problems Observed

Building 2:

01: Prepared design report not fully comply with BNBC.

02: Signage of dampness.

03: Lack of as-built drawing at roof.

04: Column susceptible to trolley impact

Priority Actions

| Item No. | Observation | Recommended Action Plan | Recommended Timeline |
|----------|--|--|----------------------|
| 01 | Prepared design report not comply with BNBC. | The building engineer to check the occupancies and update the floor live loading plan for the building based on BNBC loading requirements, capacity of building floor, column & foundations. | 6-weeks |
| 02 | Prepared design report not comply with BNBC. | Revise the design report as per updated load plan. | 6-weeks |
| 03 | Prepared design report not comply with BNBC. | Implement the floor loading plan (posting load plan, providing signage and maintaining loadings). | 6-months |
| 04 | Signage of dampness. | Building engineer is required to identify the reason of the dampness and suggest suitable repair works. | 6-weeks |

| Item No. | Observation | Recommended Action Plan | Recommended Timeline |
|----------|---------------------------------------|--|----------------------|
| 05 | Signage of dampness. | Carryout repair works where necessary. | 6-weeks |
| 06 | Lack of as-built drawing of roof. | Building engineer is required to produce as-built drawings of the roof. | 6-weeks |
| 03 | Column susceptible to trolley impact. | The factory engineer is required to provide proper barrier around the columns to protect from possible trolley impact. | 6-weeks |