

# Needle Drop Ltd. (Extension)

50, Chandapara, Bason Road, National University, Joydevpur, Gazipur-1704  
(23.972806, 90.360421)

16 November 2021



# Buildings Information

1. Main Production Building Extension is seven storied (G+6) reinforced concrete (RC) building.
2. Utility Building 2 is a single storied reinforced concrete (RC) building with a basement.

# Observations

**Prepared design report not comply with BNBC**



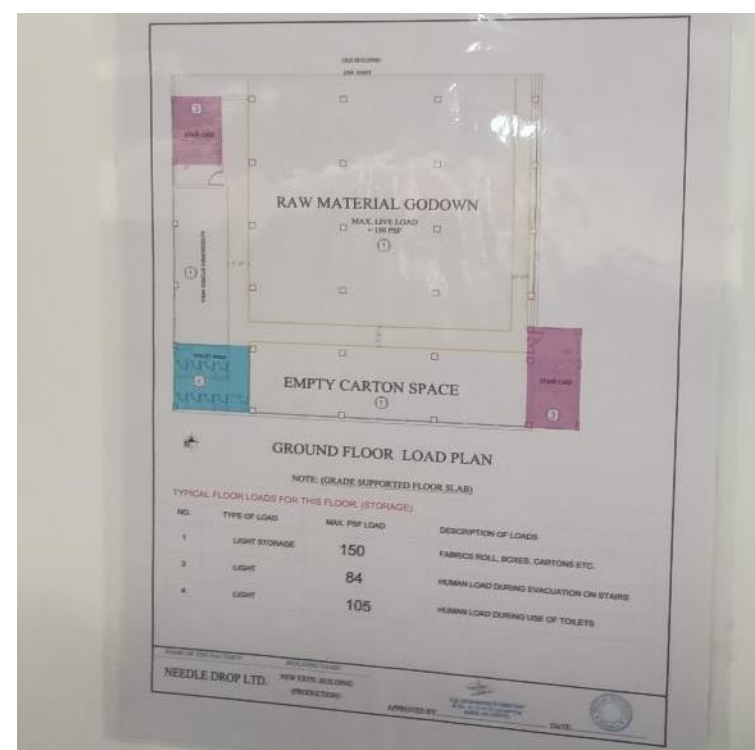
Floor Loading

Table 7: Live load (Ref. BNBC 06, Ch-2, Table: 6.2.3)

Use	UDL (lb/ft <sup>2</sup> )
Roof	30
Fabric Store 2 (1 <sup>st</sup> Floor)	105
SW1 to SW4 (Sewing Floors: 2 <sup>nd</sup> to 5 <sup>th</sup> )	63
Toilet Area	105
Stair	84
Water Tank	205
Mosque (Prayer Hall)	63

Floor loading as per design report

As per BNBC, the minimum floor live load for light storage is 6 kN/m<sup>2</sup> (125 psf). The storage in this building is designed for 5 kN/m<sup>2</sup> live loads. The building engineer is required to revise the storage live load limit based on BNBC requirement.



Floor Load plan (1<sup>st</sup> floor)

INDUSTRIAL, STORAGE & HA (Occupancy - G, H & J)	Workshop, factory, wareh		ice	15.0	9.0 <sup>(5)</sup>
2.7	5 Printing plant :				
4.5	Press room		7.0	11.0	<sup>(5)</sup>
	Composing and linotype room		5.0	9.0 <sup>(5)</sup>	
	Paper storage room		12.0	9.0 <sup>(5)</sup>	
2.7	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 <sup>(5)</sup>	
4.5	8 Storage warehouses : light		6.0	4.5 <sup>(5)</sup>	
	heavy		12.0	9.0	
4.5	9 Foundries		20.0	12.0	
7.0					

# Problems Observed

## Main Production Building Extension:

01: Prepared design report not comply with BNBC.

# Priority Actions

Item No.	Observation	Recommended Action Plan	Recommended Timeline
01	Prepared design report not comply with BNBC. (Main production building extension)	The building engineer to check the occupancies and update the floor live loading plan for the building based on BNBC loading requirements and capacity of building floor, column & foundations.	6-weeks
02	Prepared design report not comply with BNBC. (Main production building extension)	Revise the design report as per updated load plan.	6-weeks
03	Prepared design report not comply with BNBC. (Main production building extension)	Implement the floor loading plan (posting load plan, providing signage and maintaining loadings).	6-months