

KNIT BAZAR (PVT.) LTD (9933)

40/41 Vadam, Tongi, Gazipur, Bangladesh

(+23.902828N, 90.356888E)

2 April 2014



Site Observations

High loads on floors 2 and 3



Excessive and uncontrolled storage of boxes and fabric on the second and third floor.



Excessive Storage

Water causing damage and corrosion



Presence of water damage and plant growth on the façade.

Roof Floor does not appear to have any waterproof membrane to protect lower floor from water damage

No waterproofing membrane was visible on the roof of the building. This means that any cracks in the surface finishes on the roof will allow water to seep into the concrete slab beneath the finishes, and cause long-term soaking of the slab.



Priority Actions

Problems Observed Summary

**ITEM 1: The factor of safety of the column is between 1.25 and 1.5.
Factory engineer to review design, loads and column stresses.**

ITEM 2: Uncontrolled and excessive storage.

ITEM 3: Roof appears not to have any waterproofing system applied.

Item 1 and actions

Preliminary load take-down calculations indicate that the critical column's factor of safety is between 1.25 and 1.5.

Priority 1 (Immediate – Now)

- Factory Engineer to review design, loads and columns stresses.
- Verify insitu concrete stresses by cores from 4 internal columns.

Priority 2 (within 6 – weeks)

- Produce and actively manage a loading plan for all floor plates within the factory giving consideration to floor capacity and column capacity.
- Detail Engineering Assessment to be completed

Priority 3 (within 6-months)

- Continue to implement load plan.

Item 2 and actions

High storage loads.

Priority 1 (Immediate – Now)

- Immediately reduce stacking height of boxes and fabric to ensure total load does not exceed 3.0kPa.

Priority 2 (within 6 – weeks)

- Mark the maximum allowable height of fabric and box stacking to ensure full compliance with specified design loads.

Priority 3 (within 6-months)

- Produce and actively manage a loading plan, ensuring maximum height of storage is adhered to in the long-term.

Item 3 and actions

Roof appears not to have any waterproofing system applied.

Priority 1 (Immediate – Now)

- None required.

Priority 2 (within 6 – weeks)

- None required.

Priority 3 (within 6-months)

- Consider applying a new waterproofing membrane.
- Manage drainage from above levels and water tanks to downpipes to avoid structural corrosion due to continuous moisture.