

Fashion Forum Ltd.

53-54, Diakhali, Jamgara, Savar, Dhaka
(+23.933559N, 90.287607E)

26 September 2013



Building Observations

Check on column loads and design required

Cursory calculations indicate column size appears to be smaller than required by code for the applied dead and live load, assuming typical concrete strength

Significant local loading

Large grid spacing
(11.85x10.8m max)

Engineer is to perform detailed calculations to code to prove column size and (if required) :

- Reduce loads by vacating floors
- Reinforce columns

Check on column loads and design required



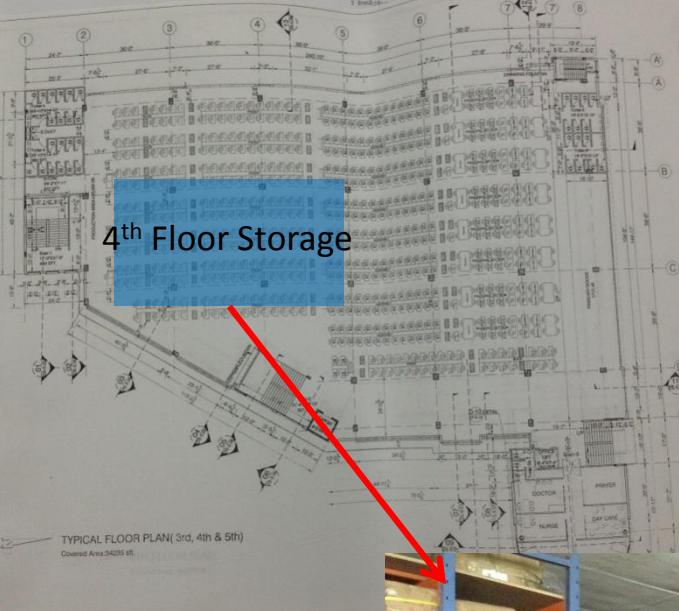
Check on roof structure from localised high loading from water tanks required



**Water tanks mounted
on concrete plinths**

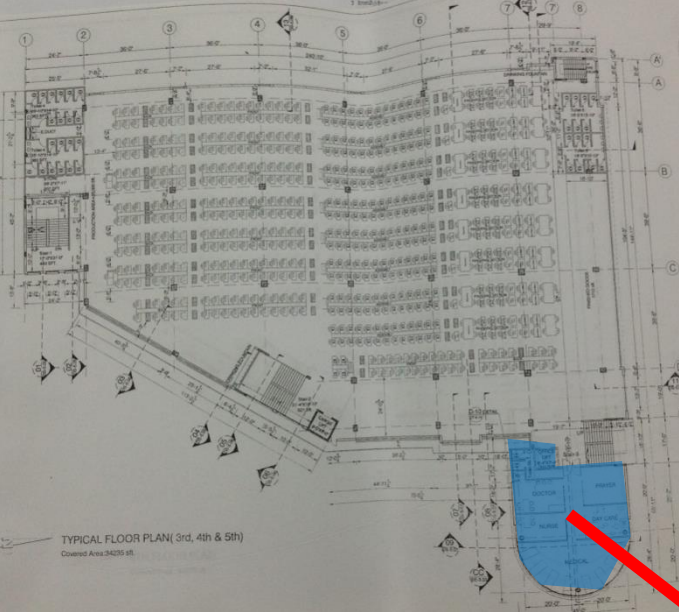
**Engineer to check that
beam and slab have
been designed to
accommodate loads.**

Limit density of loading on floor slabs



Material/ fabric rolls stacked to ceiling within storage areas. This appears to locally exceed the design live load which is noted on the provided slab calculations as 2.9kN/m^2

Plan and height restrictions to be introduced to prevent future overloading.



4th Floor Office Area



Electrical busbar within boxes – unknown loading with asymmetric pattern loading

Boxes to be spread out and load determined by Building Engineer

Priority Actions

Problems Observed

ITEM 1: Check on column loads and design required

ITEM 2: Check on roof structure from localised high loading from water tanks required

ITEM 3: Limit density of loading in storage areas

ITEM 4: Post-tensioned slabs – quality control for grouting

	Observation	Recommended Action Plan	Priority
1	Check on column loads and design required - Verify concrete strengths in internal columns	Partially vacant levels 5 & 6 shall not have loading increased until following actions completed	Immediate - Now
2	Check on column loads and design required - Verify concrete strengths in internal columns	Factory Engineer to review design, loads and columns stresses in area identified above.	Immediate - Now
3	Check on column loads and design required - Verify concrete strengths in internal columns	Verify insitu concrete strengths either by cores (from at least 4 columns) or existing cylinder strength data. A Detail Engineering Assessment of Factory to be commenced, see attached Scope	Immediate - Now
4	Check on column loads and design required - Verify concrete strengths in internal columns	Produce and actively manage a loading plan for all floor plates within the factory giving consideration to floor capacity and column capacity.	6-weeks

	Observation	Recommended Action Plan	Priority
5	Check on column loads and design required - Verify concrete strengths in internal columns	Detail Engineering Assessment to be completed.	6-weeks
6	Check on column loads and design required - Verify concrete strengths in internal columns	Continue to implement loading plan.	6-months
7	Check on roof structure from localised high loading from water tanks required - Water tanks located on the roof structure mounted on concrete plinths	Verify that beam/slab has sufficient capacity to support fully filled water tanks plus concrete plinth	6-weeks

	Observation	Recommended Action Plan	Priority
8	Limit density of loading in storage areas - Materials stacked densely locally (eg 4th floor storage area). Note that these would appear to locally exceed the design live load which is noted on the provided slab calculations as 2.9kN/m2	Building Engineer to create controlled loading plans for all floors designating where storage can be placed and cannot be placed.	6-weeks
9	Post-tensioned slabs – quality control for grouting - Review of design, quality control and documentation for post tensioned slab structures	Commence design checking of PT slabs as part of Detail Engineering Assessment	Immediate - Now
10	Post-tensioned slabs – quality control for grouting - Review of design, quality control and documentation for post tensioned slab structures	Survey typical PT tendon top and bottom covers in slab to confirm that profile of cables matches the design requirements	Immediate - Now

	Observation	Recommended Action Plan	Priority
11	Post-tensioned slabs – quality control for grouting - Review of design, quality control and documentation for post tensioned slab structures	Building Engineer to review concrete cylinder strength records, strand extension results, as-surveyed cable profiles and grouting records for PT slabs to establish if these match design requirements	6-weeks
12	Post-tensioned slabs – quality control for grouting - Review of design, quality control and documentation for post tensioned slab structures	This will be required as an input to the controlled loading plans	6-weeks
13	Post-tensioned slabs – quality control for grouting - Review of design, quality control and documentation for post tensioned slab structures	Factory Engineer to As part of Detail Engineering Assessment – confirm PT slabs are adequate	6-weeks