

# Fashion Step Ltd.

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(23.915326, 90.370666)  
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# Observations

# Localised Areas of High Loading



Localised areas of high loading on roof structure.

Full bay temporary water storage loads not captured by design.

Preliminary calculations indicate floor structure is overloaded.



Localised areas of high loading on roof structure.



# Risk of High Impact Loads to Critical Column



Ground floor loading dock.

Significant risk of impact loads from vehicles to critical edge column.

Refer column circled in red.



Existing damage to structure observed. Refer location circled in red.

# Floor Penetrations not well Constructed



**Some penetrations are oversized relative to size of service conduits.**

**Rough exposed concrete faces apparent.**

**Durability of exposed reinforcement limited.**



**Multiple penetrations created after concrete floors and rendered brick walls constructed. Façade openings pictured adjacent.**

**Condition of penetrated structure indicates work method not well controlled.**

# Internal Non-Structural Wall Stability



Penetrations in internal wall limits lateral and vertical load paths.

Vertical and lateral capacity of wall not clear.

Long length of tall wall restrained at base only.

Load path redundancy not evident.

Wall thickness and restraint conditions indicate limited engineering input during construction.



# Load Management in Storage Areas



**High storage loading evident in some areas. Load management system incomplete.**

**No stack height limits displayed.**

**No maximum floor loading plans displayed.**

# Priority Actions

# Problems Observed

1. Localised area of high loading.
2. Risk of high impact load to critical column.
3. Floor penetrations not well constructed.
4. Internal non-structural wall stability.
5. Load management in storage areas.

Item No.	Observation	Recommended Action Plan	Recommended Timeline
1	Engineering Assessment of water storage on roof (level 6)	Cover brick masonry tank to prevent rain water ingress AND	<b>Immediate - Now</b>
2	Engineering Assessment of water storage on roof (level 6)	Empty brick masonry tank OR	<b>Immediate - Now</b>
3	Engineering Assessment of water storage on roof (level 6)	Provide two floors of back propping below brick masonry tank.	<b>Immediate - Now</b>
4	Engineering Assessment of water storage on roof (level 6)	Building Engineer to assess the load carrying capability of the roof floor structure supporting the brick masonry tank and determine a maximum water height limit.	<b>6-weeks</b>
5	Engineering Assessment of water storage on roof (level 6)	Provide a overflow pipe to limit water height.	<b>6-weeks</b>
6	Engineering Assessment of water storage on roof (level 6)	Engineer for future extension to ensure construction loading and water tank loading does not exceed the capacity of level 6/roof.	<b>6-months</b>
7	Engineering Assessment of water storage on roof (level 6)	Load limits and back propping to be specified as appropriate.	<b>6-months</b>

Item No.	Observation	Recommended Action Plan	Recommended Timeline
8	Protection of critical element from vehicle impact in loading dock	Place temporary warning /protection (e.g. traffic cone, sand filled barrels as deemed appropriate by building engineer) at 1m from column faces	<b>Immediate - Now</b>
9	Protection of critical element from vehicle impact in loading dock	Building engineer to design appropriate impact protection for critical column within loading dock	<b>6-weeks</b>
10	Protection of critical element from vehicle impact in loading dock	Construct and maintain protection to critical column and continue to assess likelihood of vehicle impact to critical elements	<b>6-months</b>
11	Ensure durability of existing structure around penetrations and implement work method for future penetrations	Scabble concrete immediately around exposed reinforcement to engineer specified concrete cover. Wire brush reinforcement.	<b>6-weeks</b>
12	Ensure durability of existing structure around penetrations and implement work method for future penetrations	Use high strength non shrink grout/mortar to ensure cover provided to reinforcement.	<b>6-weeks</b>
13	Ensure durability of existing structure around penetrations and implement work method for future penetrations	Building manager and building engineer to create a work method statement (WMS) for future penetrations though reinforced concrete structure.	<b>6-weeks</b>
14	Ensure durability of existing structure around penetrations and implement work method for future penetrations	WMS must incorporate an engineering assessment of proposed penetration before construction.	<b>6-weeks</b>
15	Ensure durability of existing structure around penetrations and implement work method for future penetrations	Building manager to ensure WMS implemented and followed for all future penetrations.	<b>6-months</b>
16	Ensure durability of existing structure around penetrations and implement work method for future penetrations	Update WMS as appropriate.	<b>6-months</b>

Item No.	Observation	Recommended Action Plan	Recommended Timeline
17	Engineering assessment of nominated existing internal walls and implement work method for construction of all future walls	Building engineer to assess stability of ground floor walls pictured in item 4 observations.	<b>6-weeks</b>
18	Engineering assessment of nominated existing internal walls and implement work method for construction of all future walls	Building manager and building engineer to create a work method statement (WMS) for construction of future internal walls.	<b>6-weeks</b>
19	Engineering assessment of nominated existing internal walls and implement work method for construction of all future walls	WMS must incorporate an engineering assessment of proposed internal wall configuration before construction.	<b>6-weeks</b>
20	Engineering assessment of nominated existing internal walls and implement work method for construction of all future walls	Building manager to ensure WMS implemented and followed for all future internal walls.	<b>6-months</b>
21	Engineering assessment of nominated existing internal walls and implement work method for construction of all future walls	Update WMS as appropriate.	<b>6-months</b>

Item No.	Observation	Recommended Action Plan	Recommended Timeline
22	Manage localised areas of high loading	To minimise risk of overloading and improve future flexibility create engineered drawings which describe maximum floor loading magnitude and loaded area	6-weeks
23	Manage localised areas of high loading	Paint stack height limits on columns in storage load areas	6-weeks
24	Manage localised areas of high loading	Continue to implement load management system	6-months
25	Manage localised areas of high loading	Update system as appropriate.	6-months