

Redpoint Jackets Ltd

Dhaka Export Processing Zone, Ganakbari, Savar, Dhaka
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Survey Observations

**Cracks on the underside of 1st and 2nd
floors at the junction of the
beam/column on gridlines E/6, F/6 and
G/6**

Evidence of remedial works



Cracks at the junction of the beam / column



Cracks in beams / columns

**Cracking to beams/slab/brickwork on the
underside of 2nd floor**



Crack in beam – u/side 2nd floor



Crack in slab u/side 2nd floor

Cracks in beams / slabs



Crack in column 1st floor



Crack in partitions 1st floor

Steel roofs to dining and store area on 2nd floor do not appear to be strong enough to resist high wind loading



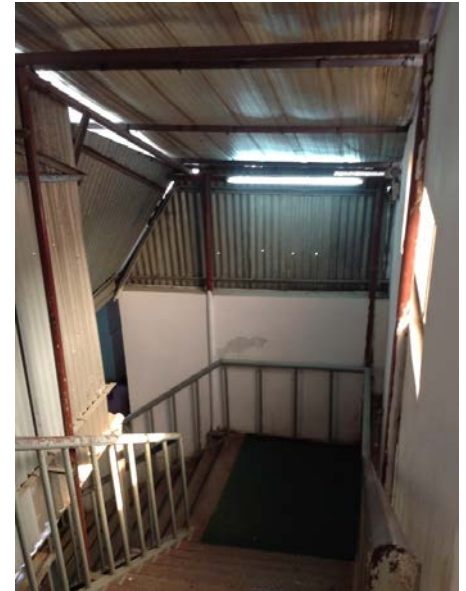
**Secondary roof structures, comprising metal deck/purlins and columns, not shown on the structural design drawings, may be susceptible to wind uplift.
No obvious stability system is evident.**



Lightweight roof steel structure not shown on the structural design drawings

Cantilever section of truss to be reviewed by Building Engineer

Steel roof to 2nd floor store



**Secondary roof structures, comprising metal deck/purlins and columns, not shown on the structural design drawings, may be susceptible to wind uplift.
No obvious stability system is evident.**

Steel roof to Dining Area



Lightweight roof steel structure not shown on the structural design drawings

Retrofit support columns to truss to be reviewed by Building Engineer

Steel roof to Dining Area

Load management of storage loads in Finished Goods area on 3rd Floor



Storage loads in Finished Goods area

**Check required to confirm that steel roof
over 3rd floor factory area is designed to
resist high wind loading**



Lightweight roof steel structure to the 3rd floor factory area is not shown on the structural design drawings.

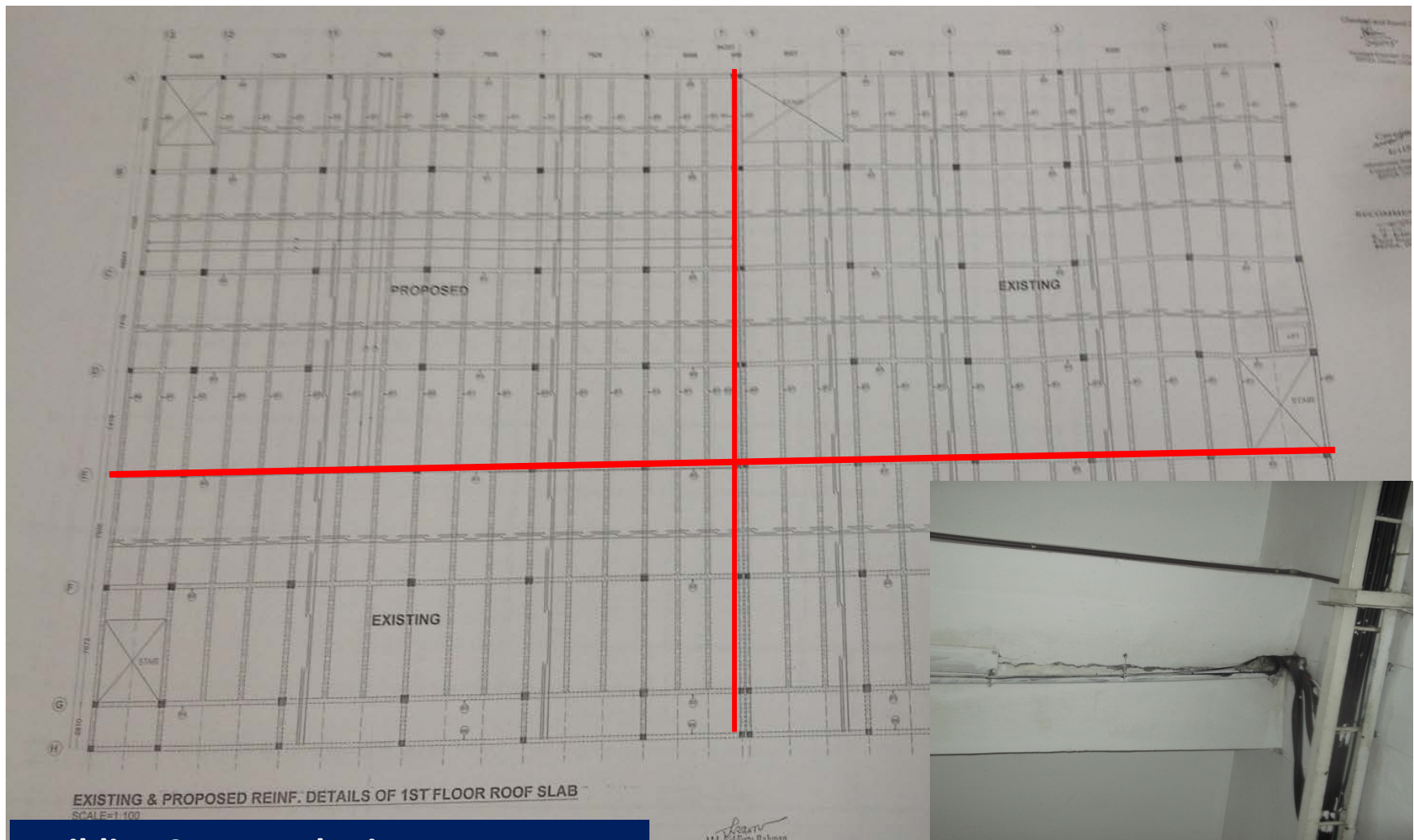
Limited access was available for inspection by removing ceiling tiles locally.



Building Engineer to confirm that steel roof has been designed for code specified wind and live loads and that a stability bracing system has been provided.

3rd Floor - Lightweight steel roof

Level difference between floor slabs constructed during the different phases of construction



**Building Structural Joints –
Between different phases of
construction**



**Evidence of movement on
underside of structural joint**

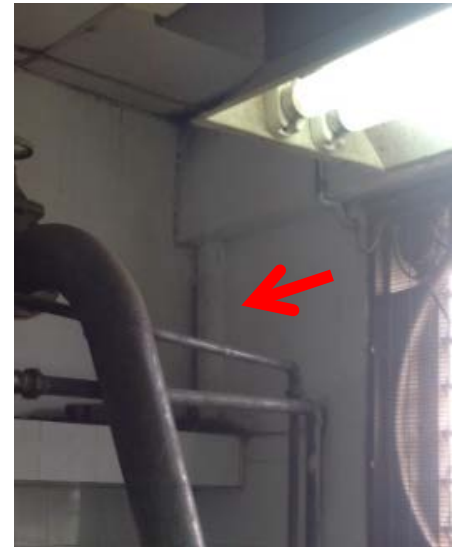
**Building constructed in different
phases**

**Redundant brick columns on gridline 6/B-C
at ground and 1st floors to be removed**



Redundant plastered 2
No brick columns on
ground and 1st floors to
be removed to ensure
that structural beam
above acts as designed

Support arrangement for water tank at the south – west corner of factory is unclear



Water tank on the 3rd floor with four circular steel stub columns not shown on the structural design drawings – support arrangement unclear. Tank being decommissioned.



Priority Actions

Problems Observed

ITEM 1: Cracks on the underside of 1st and 2nd floors at the junction of the beam/column on gridlines E/6, F/6 and G/6

ITEM 2: Cracking to beams/slab/brickwork on the underside of 2nd floor

ITEM 3: Steel roofs to dining and store area on 2nd floor do not appear to be strong enough to resist high wind loading

ITEM 4: Load management of storage loads in Finished Goods area on 3rd Floor

ITEM 5: Check required to confirm that steel roof over 3rd floor factory area is designed to resist high wind loading

ITEM 6: Level difference between floor slabs constructed during the different phases of construction

ITEM 7: Redundant brick columns on gridline 6/B-C at ground and 1st floors to be removed

ITEM 8: Support arrangement for water tank at the south – west corner of factory is unclear

Item 1 and actions

Cracks on the underside of 1st and 2nd floors at the junction of the beam/column on gridlines E/6, F/6 and G/6

Priority 1

(Immediate - Now)

- None required

Priority 2

(within 4-months)

- Sections of plaster finish to beams/columns to be removed to investigate if cracks penetrate the building structure.

Priority 3

(within 6-months)

- Building Engineer to carry out design check on beams to confirm that these cracks are non-structural.
- Building Engineer to monitor location of cracks and ensure that further remedial works are carried out where required

Item 2 and actions

Cracking to beams/slab/brickwork on the underside of 2nd floor

Priority 1

(Immediate - Now)

- None required

Priority 2

(within 4-months)

- Sections of plaster finish to beams/slab to be removed to investigate if cracks penetrate the building structure.

Priority 3

(within 6-months)

- Building Engineer to carry out design check on beams/slab to confirm that these cracks are non-structural.
- Building Engineer to issue details of repair works to be completed

Item 3 and actions

Steel roofs to dining and store area on 2nd floor do not appear to be strong enough to resist high wind loading

Priority 1

(Immediate - Now)

- None required

Priority 2

(within 4-months)

- Steel roofs to dining and store area should be designed by the Building Engineer and, if required, upgraded to support code vertical and wind loads or they should be vacated and removed

Priority 3

(within 6-months)

- None Required.

Item 4 and actions

Load management of storage loads in Finished Goods area on 3rd Floor

Priority 1

(Immediate - Now)

- None required

Priority 2

(within 4-months)

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

Priority 3

(within 6-months)

- None Required

Item 5 and actions

Check required to confirm that steel roof over 3rd floor factory area is designed to resist high wind loading

Priority 1

(Immediate - Now)

- None required

Priority 2

(within 4-months)

- The steel roof over the 3rd floor factory area should be designed by the Building Engineer and, if required, upgraded to support code vertical and wind loads or they should be vacated and removed.

Priority 3

(within 6-months)

- None Required

Item 6 and actions

Level difference between floor slabs constructed during the different phases of construction

Priority 1

(Immediate - Now)

- None required

Priority 2

(within 4-months)

- None required

Priority 3

(within 6-months)

- Building Engineer to carry out on-going monitoring of floor slab levels along the line of the two construction joints at each floor level to confirm that no relative movement is now taking place and that the current level difference is associated with an error in the alignment of the floor slabs at construction.

Item 7 and actions

Redundant brick columns on gridline 6/B-C at ground and 1st floors to be removed

Priority 1

(Immediate - Now)

- None required

Priority 2

(within 4-months)

- None required

Priority 3

(within 6-months)

- Two plastered brick columns to be removed, as they are now redundant, and may provide support to the beam above in the event of an increase in floor load. This additional support would result in a beam support point which it is understood would not have been included in the original design.

Item 8 and actions

Support arrangement for water tank at the south – west corner of factory is unclear. (Note – this issue was highlighted in the previous inspection by Ludwig Meyer and we understand that it is currently being actioned by decommissioning the water tank.)

Priority 1

(Immediate - Now)

- Tank to be drained/emptied
Soonest

Priority 2

(within 4-months)

- Water tank to be decommissioned and a replacement tank provided in a location to be agreed with the Building Engineer

Priority 3

(within 6-months)

- None required