

Diganta Sweater Ltd. Tricotex Sweaters Ltd. Sweaters Zone Ltd.

Naoujoor, Tangail Road, Chandana,
Chowrasta, Gazipur - 1702
(23.988488N,90.365998E)

01 April 2014



Observations

Design check required for floor build-ups and toilet areas Buildings 1 and 2



170mm high floor build-up in toilet area supported by concrete slab and beam arrangement.

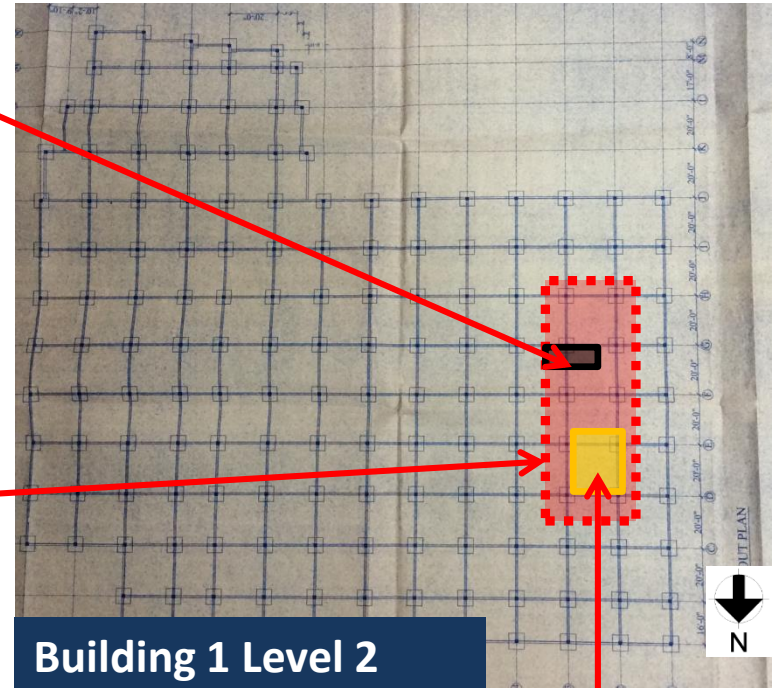


Building Engineer to verify that the columns, slabs and beams have been adequately designed to carry floor build-up loads



830mm Wash basin

Building Engineer to verify that the columns, slab and beams have been adequately designed to carry floor build-up loads



Building 1 Level 2

**75mm floor built-up on
60mm floor built-up**

Design check required for columns supporting water tanks in Buildings 1 and 2



Building 1 water tanks located at corners of the building.

Building Engineer to verify that the columns supporting the tanks have adequate carrying capacity



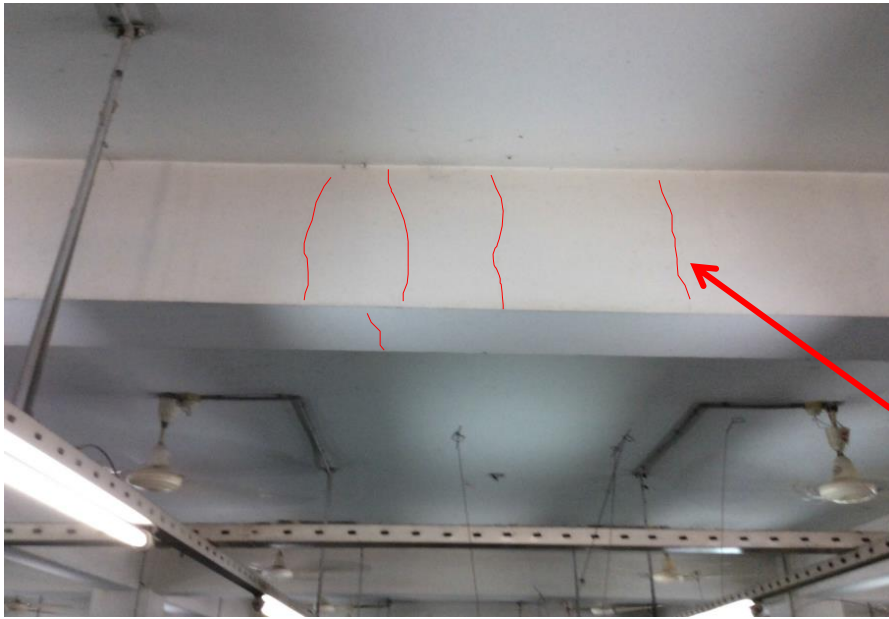


Building 2 water tanks located at corners of the building.

Building Engineer to verify that the columns supporting the tanks have adequate capacity



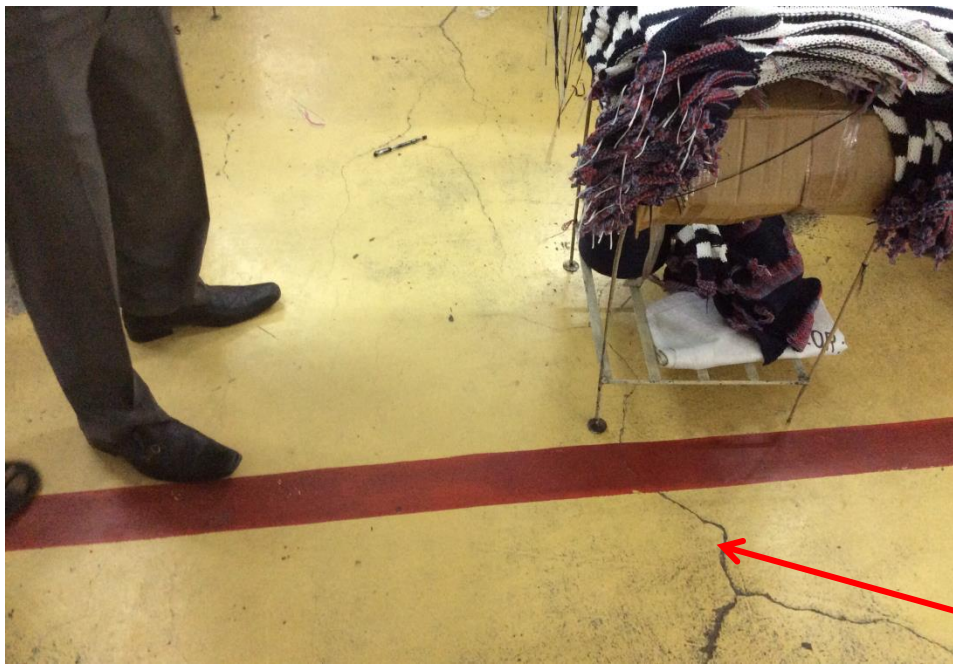
**Hairline cracking observed on soffit
and sides of beams at all levels of
Buildings 1 and 2**



Typical non-structural parallel cracking at mid-span of beam, and random cracks near support. The cracks are more widespread at the underside of the roof.



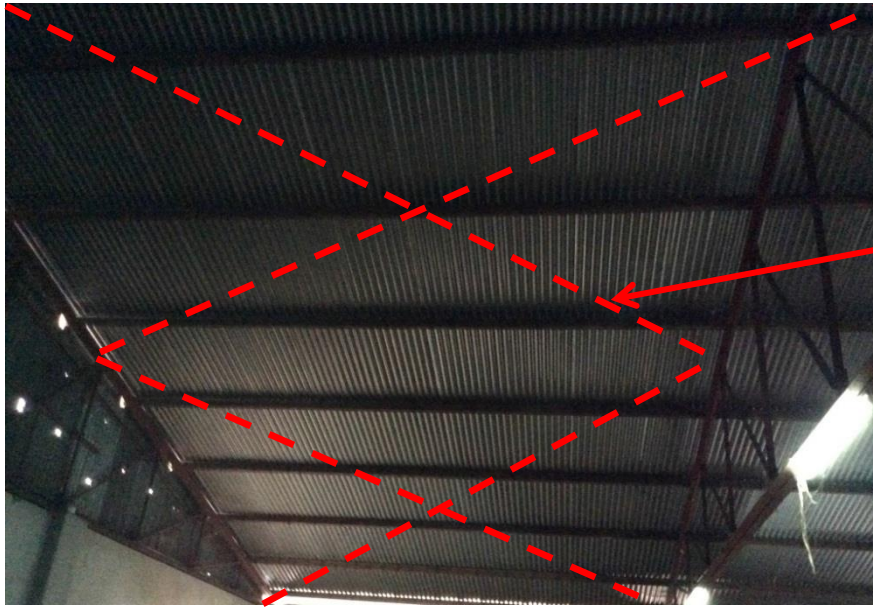
**Cracking observed on the floor
finishes at all levels where concrete
screed was used**



Cracking observed on the floor finishes at every level. It appear that these are superficial as there are no evidence that cracking is extending to slab soffit and there is no cracking to tiled areas of the slab.



No roof bracing provided for sheds

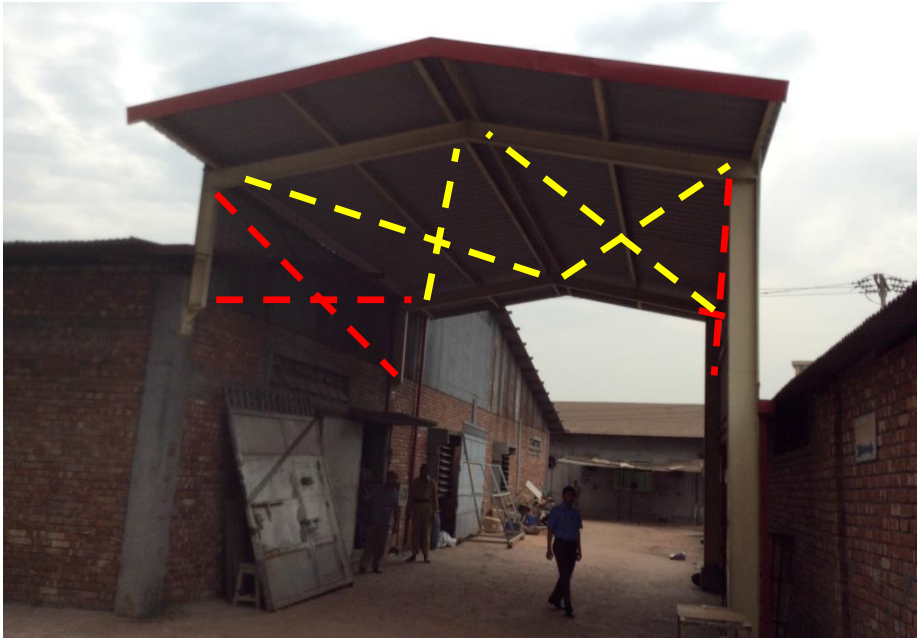


No
horizontal
bracing

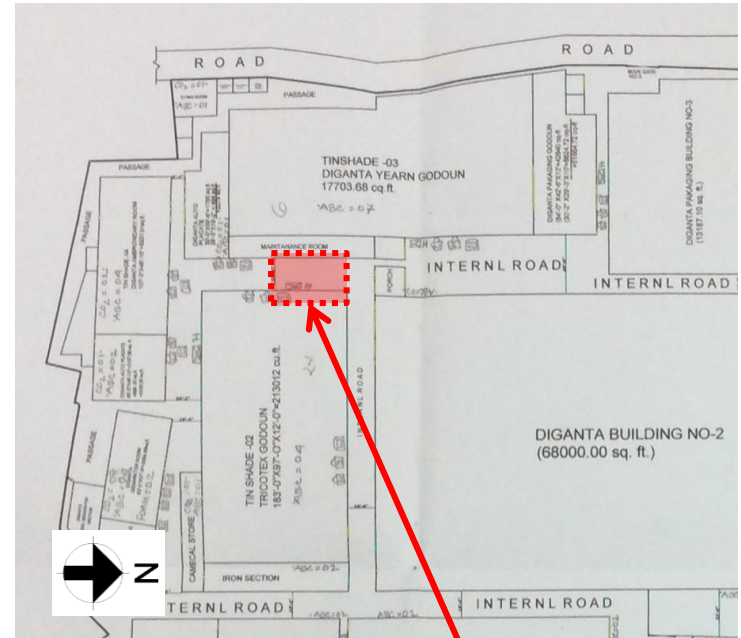
Design check required for
lateral stability



No bracing



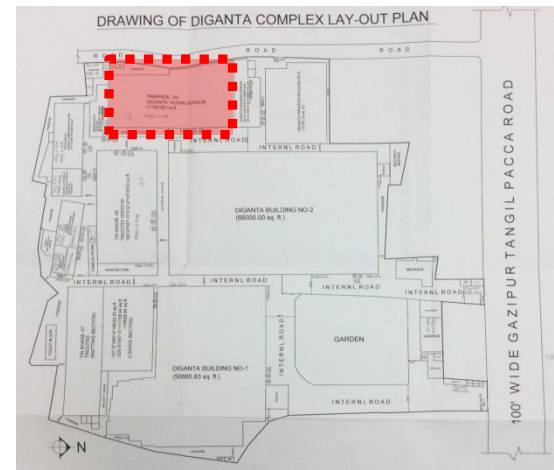
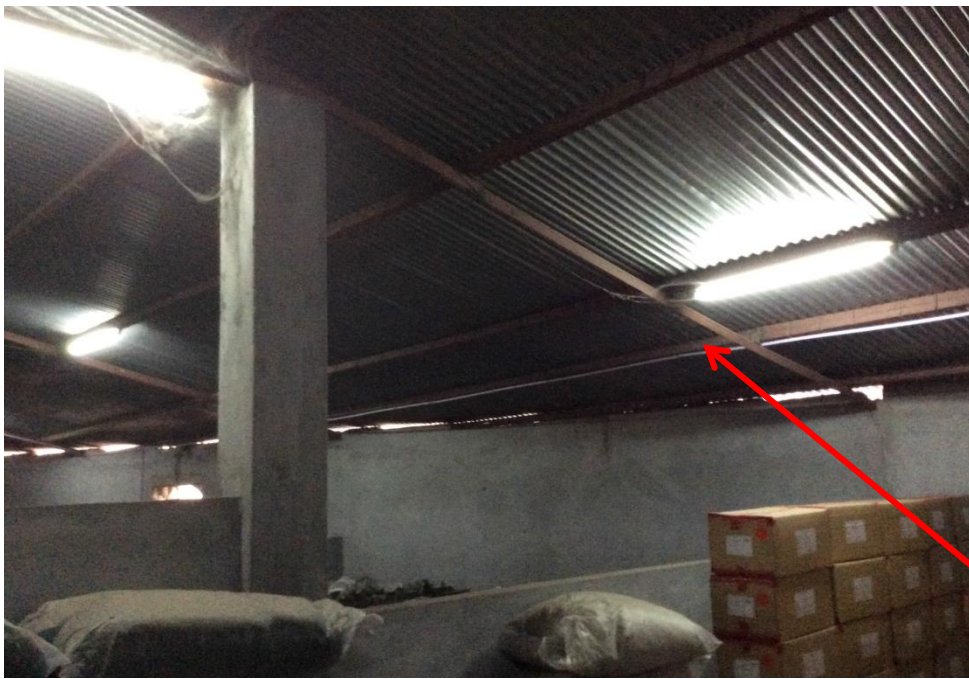
No bracing provided to the portal frame for stability.



Location of portal frame shed

Building 3

Deflections in existing roof structure



Rafter deflecting excessively

Rafters provided in Building 3 extension appear too small. Review and replace if necessary with suitable steel section.



Existing remedial support.

Priority Actions

Problems Observed

1. Buildings 1 and 2 - Column strengths under toilet areas and water tanks
2. Buildings 1 and 2 – Slabs and beam strengths in toilet areas
3. Ancillary Buildings – Lack of roof bracing
4. Building 7 – Roof deflections

Item No.	Observation	Recommended Action Plan	Recommended Timeline
1	Buildings 1 and 2 – Verify concrete strengths in ground floor columns below toilet areas and water tanks	Factory Engineer to review design, loads and column stresses in areas identified above.	6-weeks
2	Buildings 1 and 2 – Verify concrete strengths in ground floor columns below toilet areas and water tanks	Verify insitu concrete stresses either by cores or existing cylinder strength data , or take 100mm dia. cores from min. 4 no. ground floor columns	6-weeks
3	Buildings 1 and 2 – Verify concrete strengths in ground floor columns below toilet areas and water tanks	Produce and actively manage a loading plan for all floor plates within the factory, giving consideration to floor capacity and column capacity.	6-months
4	Buildings 1 and 2 – Verify slab and beam strengths in toilet areas	Factory Engineer to review design, loads and slab/beam stresses in areas identified above.	6-weeks
5	Buildings 1 and 2 – Verify slab and beam strengths in toilet areas	Implement any actions arising from design review.	6-months
6	Buildings 3 to 7 – Lack of Roof Bracing	Buildings 3 to 7 – Lack of Roof Bracing	6-weeks
7	Buildings 3 to 7 – Lack of Roof Bracing	Building Engineer to ensure that any necessary remedial modifications are completed.	6-months
8	Building 7 - Roof Design	Building engineer to review roof design for elements where large deflections are present in Building 7.	6-weeks
9	Building 7 - Roof Design	Implement actions arising from review of roof design.	6-months