

Revision: Issue 01
Date: 09.04.2014

Meditex Industries Ltd (9253)

Plot #912, Kashimpur Road, Konabari, Gazipur

(+24.005503N, 90.315594E)

09.APRIL.2014

Client Summary Report

Observations & Actions



ACCORD
on Fire and Building Safety in Bangladesh



Identified Priority 1 Concerns

(None)

Identified Priority 2 Concerns

Low Column Safety Factors in Phase 2

Uncertainty Regarding Inconsistent As-Built Drawings

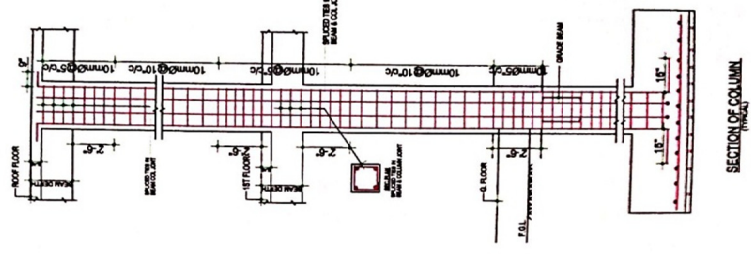
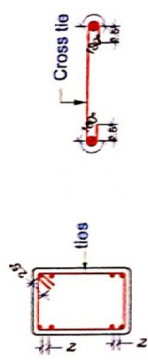
Poor Steel Framing at Rooftop Prayer Room

Priority 2 Concern

COLUMN SCHEDULE

Floor Level	COLUMN					TIE
	C-1	C-2	C-3	C-4	C-5	
5th Floor Level	12x12x8 12x12x8	12x12x8 12x12x8	12x12x8 12x12x8	12x12x8 12x12x8	20x20x12 20x20x12	Down 5 5'-10" x 5'-10" x 5
4th Floor Level	12x12x8 12x12x8	12x12x8 12x12x8	12x12x8 12x12x8	12x12x8 12x12x8	20x20x12 20x20x12	Down 5 5'-10" x 5'-10" x 5
3rd Floor Level	12x12x8 12x12x8	12x12x8 12x12x8	12x12x8 12x12x8	12x12x8 12x12x8	20x20x12 20x20x12	Down 5 5'-10" x 5'-10" x 5
2nd Floor Level	12x12x8 12x12x8	12x12x8 12x12x8	12x12x8 12x12x8	12x12x8 12x12x8	20x20x12 20x20x12	Down 5 5'-10" x 5'-10" x 5
1st Floor Level	12x12x8 12x12x8	12x12x8 12x12x8	12x12x8 12x12x8	12x12x8 12x12x8	20x20x12 20x20x12	Down 5 5'-10" x 5'-10" x 5
Basement Floor	12x12x8 12x12x8	12x12x8 12x12x8	12x12x8 12x12x8	12x12x8 12x12x8	20x20x12 20x20x12	Down 5 5'-10" x 5'-10" x 5

NOTE: Tie = 3/16" dia (11.3 3/4" clear graded stone chips) 19-2017-2018



Within phase 2 under minimum allowable live loads, column checks yield lower than desirable safety factors.

High Column Stresses in Phase 2



Exceedingly light steel sections were observed framing the shade over the rooftop prayer area.

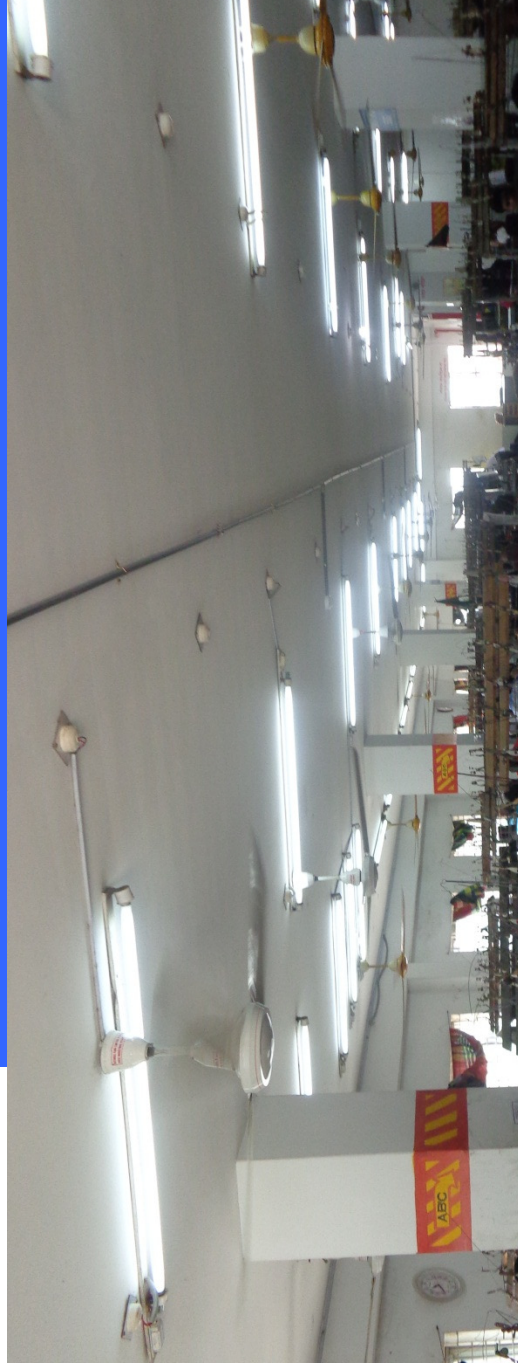
Light Steel Framing at Rooftop Shed

Identified Priority 3 Concerns

(None)

Overall Stability System

Within Phases 3 & 4 there are flat slab configurations above the 1st Floor slab level. Additionally there are no shear walls or braced frames present. This creates uncertainty regarding the lateral stability of these structures.



We require that these items be investigated in a Detailed Engineering Assessment

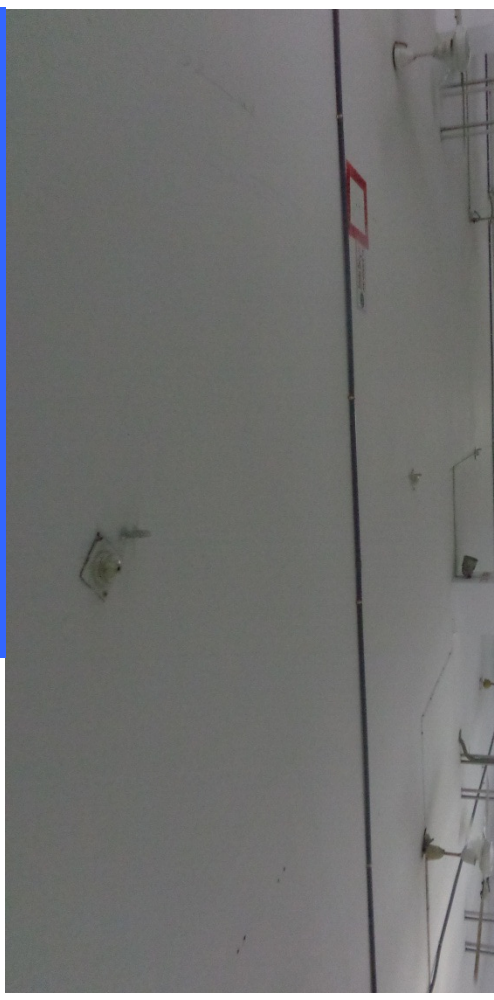
Lateral Restraint System

Water Ingress at Roof Level



There was no waterproofing observed at the rooftop level

There was no evidence of water infiltration at the underside of roof slabs



Roof Waterproofing System

Priority Actions

Problems Observed Summary

ITEM 1: (Priority 2) As-built drawings provided are in some instances inconsistent with building construction. It was not possible for the factory engineering staff to describe how the reinforcing shown on as-built drawings had been determined.

ITEM 2: (Priority 2) Column stresses within Phase 2 are higher than desirable even under minimum allowable live loads.

ITEM 3: (Priority 2) The prayer room shade at the rooftop level was composed of very light steel framing.

ITEM 4: (Priority 2) Phases 3 & 4 are lacking an apparent lateral restraint system.

Item 1 and actions

Inconsistent as-built drawings

Priority 1 (Immediate – Now)

- None

Priority 2 (within 6 weeks)

- Commission a detailed engineering assessment to ascertain the structural adequacy of as-built conditions as well as the quantities of existing reinforcement, sizes of structural members and building layout.

Priority 3 (within 6 months)

- Implement any works deemed necessary by the detailed engineering assessment.

Item 2 and actions

Inconsistent as-built drawings

**Priority 1
(Immediate – Now)**

- None

**Priority 2
(within 6 weeks)**

- Detailed engineering assessment scope to include assessment of adequacy of existing columns.

**Priority 3
(within 6 months)**

- Implement any works deemed necessary by the detailed engineering assessment.

Item 3 and actions

Light steel framing of rooftop prayer room shade

Priority 1 (Immediate – Now)

- None

Priority 2 (within 6 weeks)

- Remove rooftop prayer room shade or detailed engineering assessment to comment on adequacy of steel shade framing to resist wind loads.

Priority 3 (within 6 months)

- If shade is not removed, implement any recommendations made by the detailed engineering assessment

Item 4 and actions

Phases 3 & 4 lack an apparent lateral restraint system above ground floor level.

Priority 1 (Immediate – Now)

- None required.

Priority 2 (within 6 weeks)

- Detailed engineering assessment to determine adequacy of structure to resist seismic and wind loads.

Priority 3 (within 6 months)

- Implement any works deemed necessary by the detailed engineering assessment.