

# Mondol Knitwears Ltd (shed)

Rashid Tower, Tongabari, Ashulia, Savar, Dhaka

(23.9055841, 90.322094)

27 September 2023



# Buildings Information

1. Single Storied Prefabricated steel shed.

# Observations

**Lack of lateral stability system in long direction**



No bracing or strut member observed along long direction

No bracing or strut member was observed in the long direction of the shed. Building engineer to carry out Engineering Assessment (EA) to check the lateral stability of the structure.

**Significant gap in connection**



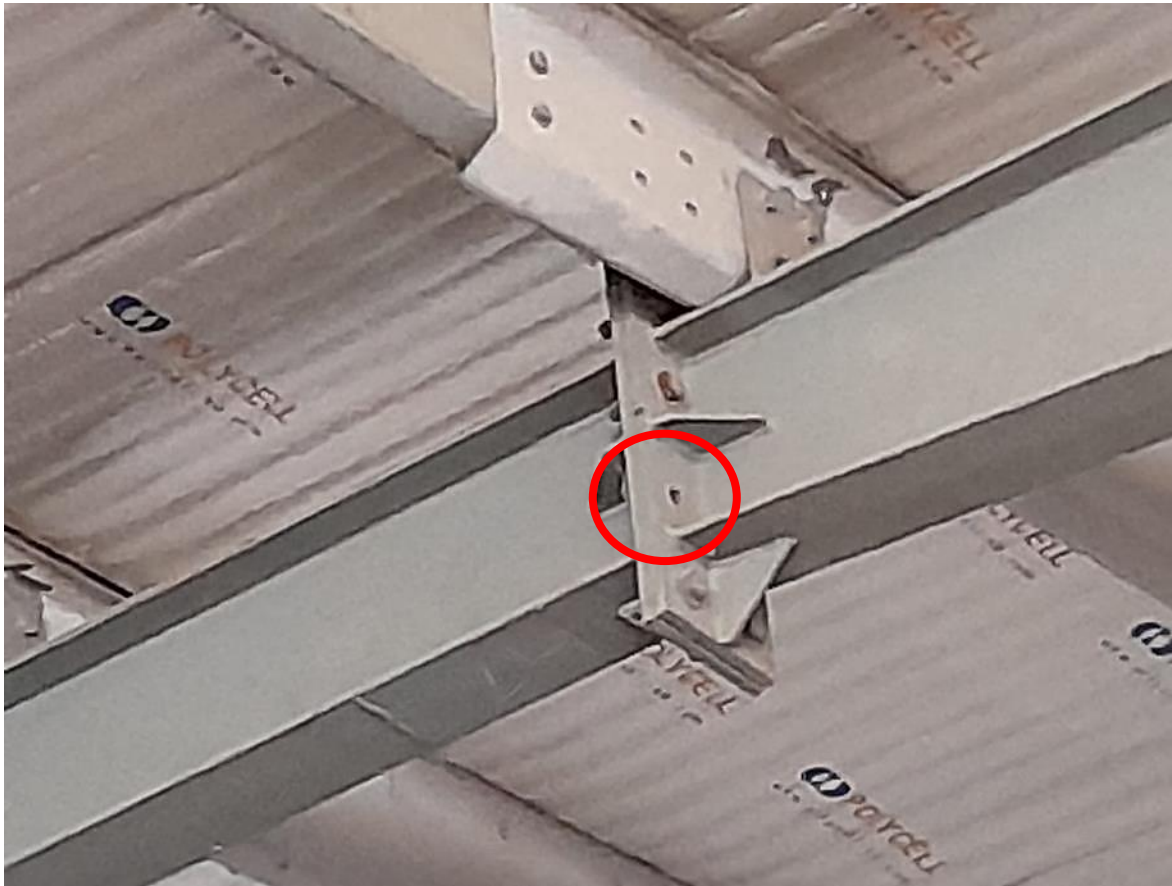
Connection gap in steel column-rafter joint



Connection gap in baseplate joint

Significant gap in the connection of the rafter to the column and base plate to the concrete pedestal was found. Building engineer is required to survey the whole structure & and identify the locations of the connection gaps and suggest proper remediation.

## **Bolt missing in steel connection**



Bolt missing

Bolt missing in several connection joints. Building engineer is required to identify all the locations and install missing bolts accordingly.

# Corrosion on steel members



Corrosion in steel members

Severe corrosion was observed on steel members. Building engineer is required to remove the corrosion and provide rust-proof paint on all steel members to protect from corrosion.

**Crack between load-bearing brick wall of boiler,  
compressor, RMS room**



Crack between the load-bearing brick wall and RC slab

Building engineer is required to investigate the cause of the crack and suggest any remediation required.

## **Lack of foundation details**



The structural system of the boiler, compressor and RMS room is an RC slab-supported 250 mm brick wall. The structure is constructed inside the shed. No foundation system is shown in the drawing. Building engineer is required to prepare foundation details and carry out foundation adequacy check for the load bearing walls.

# Priority Actions

# Problems Observed

## Warehouse Shed:

Item 01: Lack of lateral stability system in long direction.

Item 02: Significant gap in connection.

Item 03: Bolt missing in steel connection.

Item 04: Corrosion on steel members.

Item 05: Crack on load-bearing brick wall of boiler, compressor, RMS room.

Item 06: Lack of foundation details.

| Item No. | Observation                                                       | Recommended Action Plan                                                                                                 | Recommended Timeline |
|----------|-------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------|----------------------|
| 01       | Lack of lateral stability system in long direction.               | Building engineer to carry out Engineering Assessment (EA) to check the lateral stability of the structure              | 6-weeks              |
| 02       | Lack of lateral stability system in long direction.               | Carry out suggested remedial works where required.                                                                      | 6-months             |
| 03       | Significant gap in connection.                                    | Building engineer is required to identify the locations of the connection gaps and repair the gap with suitable method. | 6-weeks              |
| 04       | Bolt missing in steel connection.                                 | Building engineer is required to identify all the locations and install missing bolts as per specification.             | 6-weeks              |
| 05       | Corrosion on steel members.                                       | Building engineer is required to remove the corrosion and apply the anti-rust coating to the steel members.             | 6-months             |
| 06       | Crack in load-bearing brick wall of boiler, compressor, RMS room. | Building engineer is required to investigate the cause of wall cracks and suggest any remediation required.             | 6-weeks              |
| 07       | Crack in load-bearing brick wall of boiler, compressor, RMS room. | Carry out suggested remedial works.                                                                                     | 6-months             |

| Item No. | Observation                 | Recommended Action Plan                                                                                                         | Recommended Timeline |
|----------|-----------------------------|---------------------------------------------------------------------------------------------------------------------------------|----------------------|
| 08       | Lack of foundation details. | Building engineer is required to prepare foundation details and carry out foundation adequacy check for the load bearing walls. | 6-weeks              |
| 09       | Lack of foundation details. | Carry out suggested remedial works.                                                                                             | 6-months             |