

# Unisense Apparels Ltd.

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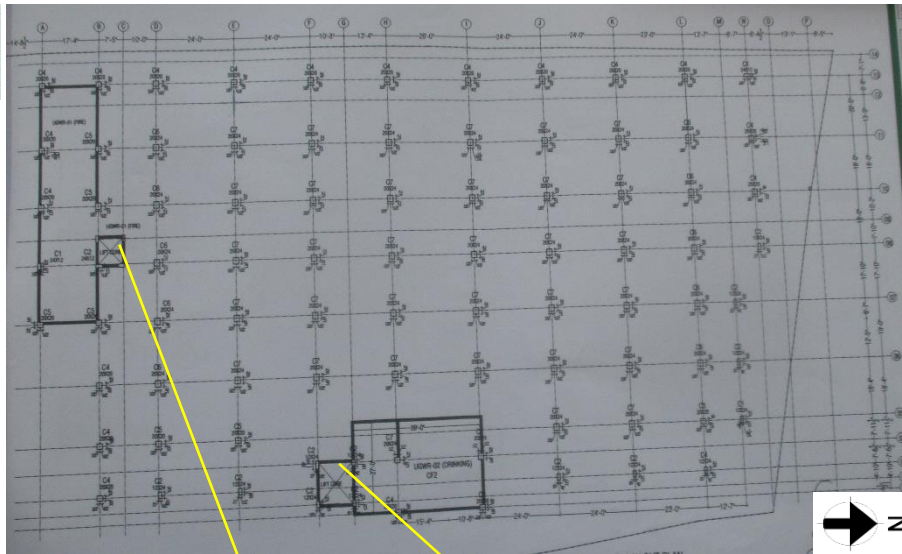


# Observations



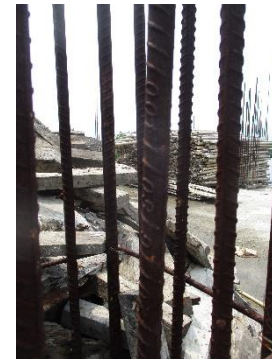
# Discrepancies between drawings and on site condition

**Observation : Production Building**



column layout.

Column size and nos. of rebar & rebars dia are not fully match with column schedule. Building engineer is required confirm the dia, size & nos. of rebar on each column.

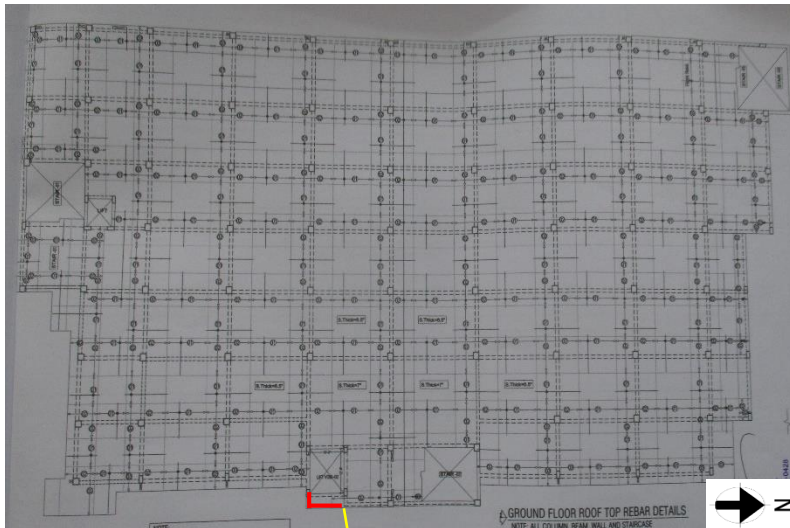


Shear walls are not shown in structural drawings which are exists on both lift core.

## Column Schedule

| COLUMN SCHEDULE            |             | NOTE: Circular rebar indicate higher dia of re-bar |                       |                       |                       |                       |                       |                       |
|----------------------------|-------------|----------------------------------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| FLOOR LEVEL                | COLUMN TYPE | C1                                                 | C2                    | C3                    | C4                    | C5                    | C6                    | C7                    |
| 3rd & 4th Floor.           |             |                                                    |                       |                       |                       |                       |                       |                       |
| f=4000 Psi<br>fy=72500 Psi |             | 24"<br>8-200 + 6-180                               | 24"<br>12-200 + 4-180 | 30"<br>16-200         | 20"<br>12-200 + 4-160 | 20"<br>12-200 + 4-160 | 20"<br>16-200         | 20"<br>4-250 + 12-200 |
| 1st & 2nd Floor.           |             |                                                    |                       |                       |                       |                       |                       |                       |
| f=4000 Psi<br>fy=72500 Psi |             | 24"<br>12-200 + 6-180                              | 24"<br>16-200         | 30"<br>4-250 + 14-200 | 20"<br>16-200         | 20"<br>16-200         | 20"<br>16-200         | 20"<br>8-250 + 8-200  |
| Gr. Floor.                 |             |                                                    |                       |                       |                       |                       |                       |                       |
| f=4000 Psi<br>fy=72500 Psi |             | 24"<br>16-200                                      | 24"<br>4-250 + 12-200 | 30"<br>4-250 + 14-200 | 20"<br>16-200         | 20"<br>4-250 + 12-200 | 20"<br>4-250 + 16-200 | 20"<br>8-250 + 12-200 |
| BELOW GS.                  |             |                                                    |                       |                       |                       |                       |                       |                       |
| f=4000 Psi<br>fy=72500 Psi |             | 27"<br>16-200                                      | 27"<br>4-250 + 12-200 | 33"<br>4-250 + 14-200 | 23"<br>16-200         | 23"<br>4-250 + 12-200 | 23"<br>4-250 + 16-200 | 23"<br>8-250 + 12-200 |

## Observations: Production Building

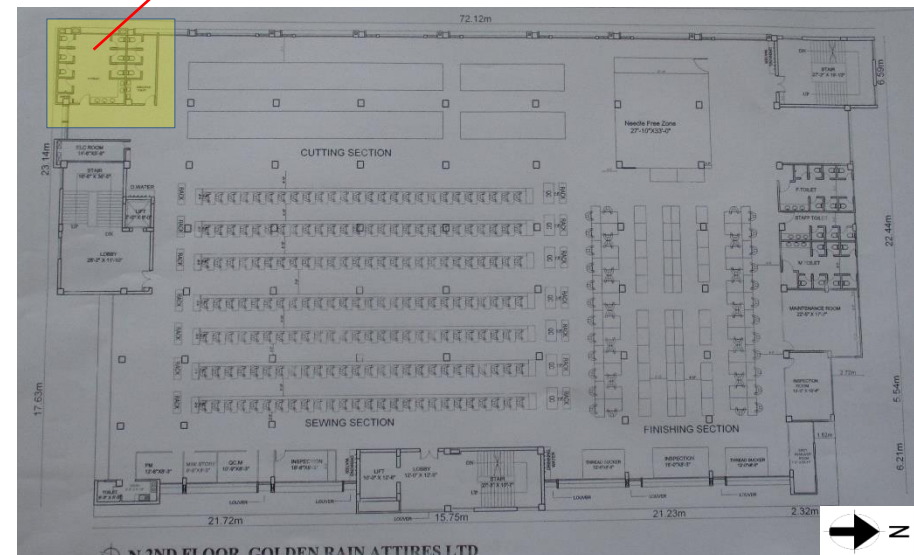


Beam Layout



Minor mismatch in beam layout. Mismatch shown in red on beam layout.

Also some mismatch found in architectural drawings. Partition walls of toilet block at South-west corner does not match with layout plan.



Floor Layout Plan

## Observations: Production Building



# Falling hazards on the roof and protect reinforcement from corrosion

**Observation : Production & Utility Building**



Factory building



Main building

Falling hazards due to unprotected edge of under construction building. All exposed reinforcement must have adequate protection from the elements. Currently the exposed reinforcement is prone to corrosion.



Utility building

## Observation : Production & Utility Building



# Water ponding and stacking of construction material on roof

**Observation : Production Building**



Water ponding found at current roof of the factory building. Also stacking of construction materials found almost every where at roof.

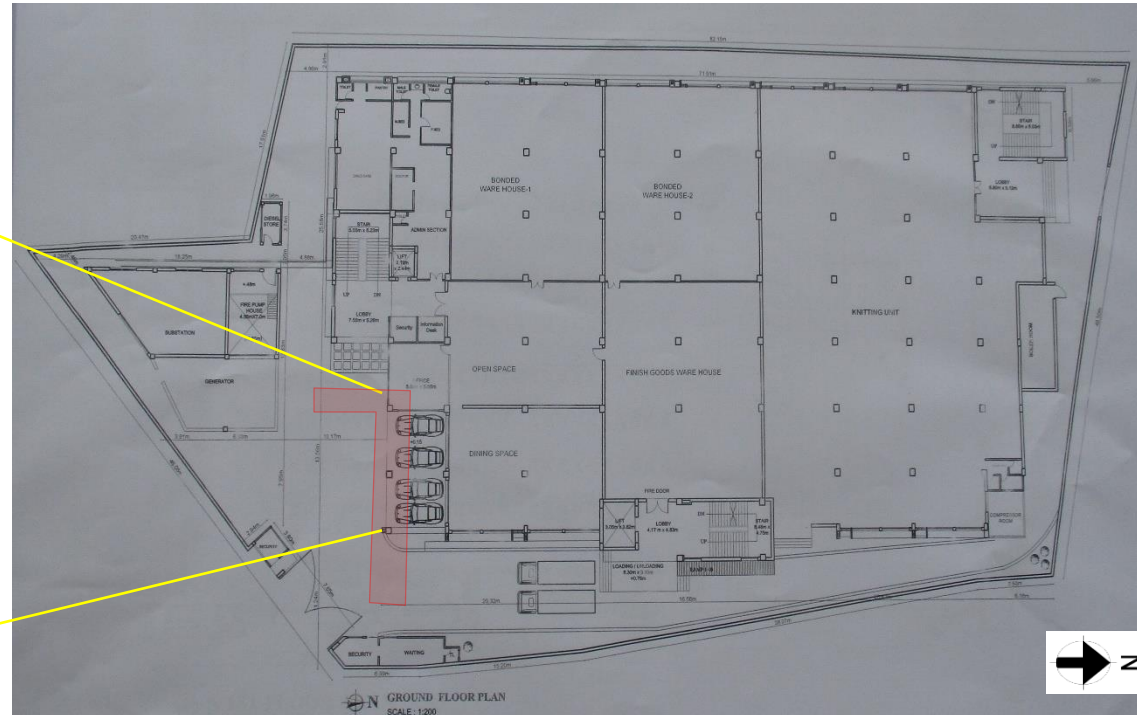




# Columns susceptible to vehicle impact



Impact protection not provided to columns at loading – unloading area. Columns are susceptible to impact loading from vehicles.



Ground floor Layout Plan

## Observation : Production Building



# Circular column not anchored with base



Column without anchorage

Poor steel member connection and anchor bolt missing at bottom of circular steel column. Factory engineer is required to be check the adequacy of connection.



# Problems Observed

## Factory Building

- Item 1: Discrepancies between drawings and on site condition.
- Item 2: Falling hazards on the roof and protect reinforcement from corrosion.
- Item 3: Water ponding and stacking of construction material on roof.
- Item 4: Columns susceptible to vehicle impact.

## Utility Building

- Item 5: Circular column not anchored with base.



| Item No. | Observation                                                                                   | Recommended Action Plan                                                                                                                                               | Recommended Timeline |
|----------|-----------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|
| 1        | (Production Building)<br>Discrepancies between drawings and on site condition                 | Engage a qualified engineer for producing correct “as-built” drawings which reflect the actual site condition with complete structural and architectural information. | 6-weeks              |
| 2        | (Production Building)<br>Falling hazards on the roof and protect reinforcement from corrosion | Secure constructed area around the perimeter wall to exclude any possible falling hazard.                                                                             | Immediate - Now      |
| 3        | (Production Building)<br>Falling hazards on the roof and protect reinforcement from corrosion | All exposed reinforcement is to be protected from corrosion which may cause degradation of the concrete.                                                              | 6-weeks              |
| 4        | (Production Building)<br>Water ponding and stacking of construction material on roof          | For both durability and serviceability, waterproofing on the roof slab is recommended. Moreover the roof slab drainage system should be investigated.                 | 6-weeks              |
| 5        | (Production Building)<br>Water ponding and stacking of construction material on roof          | Remove construction materials from roof top.                                                                                                                          | 6-weeks              |



| Item No. | Observation                                                    | Recommended Action Plan                                              | Recommended Timeline |
|----------|----------------------------------------------------------------|----------------------------------------------------------------------|----------------------|
| 6        | (Production Building)<br>Columns susceptible to vehicle impact | Install a barrier to prevent vehicle impact in column.               | 6-weeks              |
| 7        | ( Utility building)<br>Circular column not anchored with base  | Factory engineer is required to be check the adequacy of connection. | Immediate - Now      |
| 8        | ( Utility building)<br>Circular column not anchored with base  | Carry out remedial works resulting from engineering assessment .     | 6-weeks              |