BY REGISTERED POST

September 23, 2024

Mr. Anand Mehta Partner M/s. Mehta & Modi Realty Kowkoor LLP Il Floor, Soham Mansion No 5/4/187 - 3 & 4, Karbala Maidan, Mahatma Gandhi Road, Secunderabad - 500 003.

Dear Sir,

Sub: CC.93/2024/TG-RERA - Meeting to Resolve Construction Defects.

As directed by the Honourable RERA Bench in the hearing on 11th September to have one more meeting with your organisation to resolve the Construction Defects in the Greenwood Heights Complex, we suggest the following process to have a meeting which will be result oriented and achieve settling of issues mutually and amicably.

 We are attaching the List of Defects/Issues to be rectified/resolved as listed in our earlier correspondence, reclassified in order of priority. The videos of some major issues like expansion joints leakage and flooding of basement 2 have already been shared by email with you.

2. Please send us your written and detailed rectification/resolution proposal with the steps proposed to be taken by you and the timeline by 30th September 2024.

3. We will then have a meeting of flat owners with your team on Saturday 5th October 2024 at 6.30 p.m. to discuss your rectification proposal and suggest modifications, if any.

4. From our side Sri Chandan Dutta (Flat No A 316) will be the spokesperson assisted by Sri S.S Raghuram (Flat No A 304) and Sri V.V Ramana Murthy (Flat No A 515) as the Technical Spokespersons.

Please provide the details of the members from your team.

The meeting will be video recorded for proof.

7. The final conclusion of the meeting will be submitted to the RERA Authority in writing before the hearing scheduled on 23rd October

As has been the case from January 2024, we reiterate our efforts to resolve the issues amicably and to for the mutual betterment of both

LIST OF CONSTRUCTION DEFECTS/OTHER ISSUES TO BE RESOLVED

A. PRIORITY ITEMS

- 1. Leakage and Flooding from Expansion Joints of A and B Blocks Detailed Report on this is attached as Annexure 1.
- 2. Flooding of Corridors Detailed Report on this is attached as Annexure 2
- Flooding of Parking Basements Detailed Report is attached as Annexure 3
- 4. Cracking of Water Pipes on the ceiling of Parking Basements.
- 5. Copper wiring from Cellar Panel to Individual flats
- 6. Increasing the Height of the Rear Compound Wall
- 7. Provision of Big Garbage Bins with Garbage Segregation
- 8. Reallot Parking Slots on First come First Serve Basis with Registered Flat Owners selecting the Slots
- 9. Halogen Lights to be provided in Parking Basement

B. OTHER ITEMS

- 10. Providing Water Level Controllers in the Sump and Overhead Tanks to automatically switch on pumps when water level is low.
- 11. Pressure Pumps to increase the flow of water to the 7th floor
- 12. Enhancing the Capacity of the Generator and provision of Automatic Switching Panel with Auto Cut In Facility
- 13. Provision of Water Softener
- 14. Provision of CC TV Cameras in all Club House Rooms and in the Rear of the Complex and DVRs/Monitors in the Security Room
- 15. In House Plumber and Electrician
- 16. Security Guards Agency to be changed to a Better Agency and adequate Guards to be provided both Day and Night.
- 17. House Keeping Agency to be appointed
- 18. Details and plans of Sewage Disposal and Rain Water Harvesting

Report on Issues Related to Expansion Joints and Water Leakage

Project Site: Greenwood Heights

Inspection Date: 21/9/2024

Introduction:

Expansion joints are crucial components in structures, designed to accommodate movements caused by thermal expansion, contraction, seismic activities, and other structural stresses. When these joints are not constructed properly, they can lead to significant problems, particularly water leakage during rains, as observed in the present case.

In this report, we highlight the issues with the current expansion joint construction, the resulting water leakage problem, the improper repair attempt made by the builder, and potential solutions to rectify this situation.

Issues with Current Expansion Joints

Several critical issues have been identified with the expansion joints, as follows:

Improper Design and Construction:

- The expansion joints have not been constructed as per the prescribed guidelines or standards, leading to water leakage during rains.
- Lack of adequate waterproofing materials or techniques in the original construction allows water to seep through the joints, causing severe structural damage over time.

 Water Leakage:

During the rains (even for small-intensity rainfall), water penetrates through the poorly constructed expansion joints. The infiltration of water weakens the surrounding structural elements, causing potential long-term damage, including corrosion of reinforcement, damp patches on walls, and weakening of floors. Photos are attached for your reference (Refer to Annexure A).

Inappropriate Temporary Repair:

After the residents filed a complaint under the Real Estate Regulatory Authority (RERA), the builder attempted to repair the joints by using white cement and granite. This method is not suitable for sealing expansion joints, as it neither provides the flexibility required to accommodate structural movement nor offers adequate waterproofing.

Such an approach is deemed ineffective and could potentially worsen the problem by trapping moisture within the structure, leading to accelerated damage.

Consequences of Poor Expansion Joint Construction

Structural Damage: Continuous water leakage will progressively weaken structural components, particularly those made of reinforced cement concrete (RCC), leading to cracking, spalling, and rusting of steel reinforcement.

Reduced Lifespan of the Building: Inadequate expansion joints can cause stress concentration at certain points of the building, accelerating its deterioration and reducing its overall lifespan.

Rectification Measures

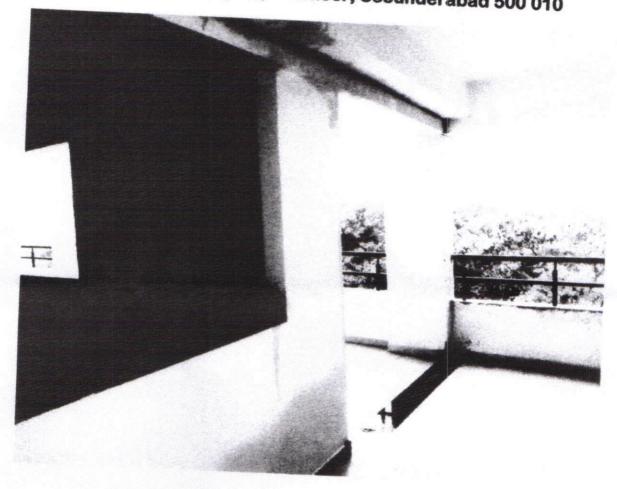
One effective and durable solution for arresting water seepage through expansion joints is the application of flexible waterproof expansion joint sealant. These sealants are designed to provide both waterproofing and flexibility, allowing the joint to accommodate structural movement without cracking or letting water through.

A step-by-step procedure is explained below:

- Preparation of the Expansion Joint:
 - Examine the expansion joint to assess the extent of damage and water seepage.
 - Remove all existing sealant, cement, granite, or any other foreign materials from the joint. Use a grinder, scraper, or wire brush for thorough cleaning.
 - Measure the width and depth of the expansion joint to ensure it meets design specifications.
 - For joints that are too wide or deep, use a backer rod (a foam rod) to reduce the depth of the joint and improve the efficiency of the sealant.
- 2. Installation of a Backer Rod:
 - Choose a backer rod that is about 25-50% larger than the joint width to ensure a tight fit.
 - Gently insert the backer rod into the cleaned expansion joint using a blunt tool (such as a wooden stick or plastic roller) to push it in without damaging it.
 - Ensure that the backer rod is placed to the desired depth, typically about twothirds of the joint depth, leaving enough space for the sealant above it.
- 3. Primer Application: Apply a primer to enhance adhesion.
- Application of Flexible Waterproof Sealant:
 - · Select a high-quality, flexible, waterproof expansion joint sealant, such as polyurethane, silicone, or hybrid polymer-based sealant, which are designed to withstand movement and weathering.
 - Apply it into the expansion joint in a steady, continuous bead.
 - The sealant should fill the space above the backer rod, bonding firmly to the sides of the joint without adhering to the backer rod.
- 5. Tooling and Smoothing the Sealant:
 - Immediately after application, use a jointing tool or a spatula to smooth the surface of the sealant.
 - Smoothing the sealant ensures proper adhesion to the joint edges and removes air bubbles or voids that could cause leakage.
- 6. Curing and Protection:
 - Cure the joint for 24 hours to several days depending on the sealant used.
 - · Protect the joint from foot traffic, rain, and other disturbances during the curing period. If necessary, cover the joint with a protective layer or barricade.
- 7. Post-Application Maintenance:

 The treated expansion joints should be inspected periodically, especially before the rainy season, to check for any damage, cracks, or signs of wear in





Report on the Condition of the Building Corridor and Water Seepage <u>Issues</u>

Project Site: Greenwood Heights

Inspection Date: 9/9/2024

Introduction:

This report outlines the current condition of the corridor of the building and the associated water seepage issues stemming from improper construction practices. The absence of proper drainage for rainwater runoff has caused significant waterlogging in the corridor, with rainwater accumulating up to 8 - 10 cm. Additionally, rainwater is seeping from the 7th floor down to the second level basement parking. This seepage is affecting several houses, some of which have suffered damage due to prolonged water exposure. The attached photographs provide visual documentation of the affected areas.

Observations:

- The corridor of the building has extensive waterlogging, with rainwater standing at a depth of 8 to 10 cm. This indicates the absence of an adequate drainage system to channel rainwater away from the corridor.
- No provisions for rainwater drainage, such as sloped surfaces or drain pipes, were found. The corridor appears to have been constructed on a flat surface without any gradient to direct water toward drainage points.
- During heavy rainfalls, the water accumulates across the corridor, leading to pooling over the entire surface.
- 4. There is significant rainwater seepage occurring from the 7th floor down to the second level basement. This indicates a critical waterproofing failure in the external walls or roof slab of the building, causing water to penetrate the structure.
- Water stains and damp patches are visible across the walls of the affected floors, with the severity of the seepage increasing on lower levels, particularly in some of the houses adjacent to the corridor.
- Water is observed dripping into the second basement parking, creating pools and potentially affecting the structural elements of the building below.
- 7. Some houses located along the corridor have experienced severe water seepage due to the prolonged exposure to rainwater. The walls, ceilings, and floors in these residences show signs of significant water damage, including paint peeling, mould growth, and cracks.
- 8. The persistent water seepage has caused dampness within the walls, leading to weakening of the plaster and deterioration of the paint finish. In some cases, household fixtures and furniture have also been damaged.
- The seepage issues suggest that the waterproofing system of the building has failed in multiple areas, especially around the roof slab, external walls, and window areas.
- 10. The lack of a dedicated rainwater drainage system for the corridor has aggravated the situation, causing further water accumulation and potential damage.

Consequences:

- The prolonged seepage and waterlogging have the potential to significantly compromise the structural integrity of the building. Water penetration into the concrete and reinforcing steel can lead to corrosion of the steel bars and a weakening
- The seepage into the basement parking area poses a risk to the foundation of the building. Continuous water exposure can lead to hydrostatic pressure build-up, cracks in the basement walls.
- 3. The waterlogged corridor creates a slippery surface, posing a safety risk for residents, particularly the elderly and children, who are more vulnerable to slip and fall accidents. Several residents have sustained injuries from slipping incidents.
- 4. The longer the water seepage and waterlogging issues persist, the higher the costs associated with repairs. Damage to internal walls, flooring, and ceilings in the residences will require costly remediation, including re-plastering, repainting, and potentially replacing affected structural components.

 Failure to address the water drainage and seepage issues promptly could lead to a need for more extensive repair work, including structural reinforcement, rewaterproofing, and major renovations.

6. In the affected residences, the water seepage has already led to damage to household fixtures, furniture, and electrical appliances. Residents may face the added financial burden of replacing or repairing these items, which can be further compounded by

Attachments:



Report on the Condition of the 1st Level Basement Parking

Project Site: Greenwood Heights

Inspection Date: 9/9/2024

Introduction:

This report highlights the condition of the 1st level basement parking area, which is experiencing significant waterlogging due to improper construction practices. Specifically, the lack of an adequate drainage has resulted in rainwater accumulation across the entire basement floor, creating a water depth ranging from 6 to 7 cm during rains. Attached images illustrate the current state of the basement parking area.

Observations:

- 1. The primary issue observed is water accumulation in the entire 1st level basement. There is no visible provision for effective drainage of rainwater.
- 2. The stagnant water depth varies between 6 to 7 cm, indicating that the surface is almost uniformly flat, without the necessary slope required for water runoff.
- 3. In addition to rainwater accumulation, this stagnation may also result from other sources such as leaks from the upper structure, lack of waterproofing, or inadequate
- 4. Upon inspection, it is evident that the slope necessary to direct rainwater toward drainage points was not adequately implemented. Basement floors typically require a slope gradient of at least 1-2% toward designated drains to prevent water from
- 5. The absence of proper slope compromises the functionality of the drainage system, if
- 6. There are either no visible drainage outlets in the parking area, or if drains are present, they are ineffective due to the flat floor layout. This could lead to clogging, poor maintenance, or improper installation of the drainage system.
- 7. The presence of significant water stagnation indicates potential waterproofing issues, especially around the basement walls and flooring. If this is the case, there may be seepage through the structure, which could exacerbate the waterlogging problem.

Consequences:

- 1. The consequences of waterlogging in the 1st level basement parking are severe, affecting both the structural integrity of the building and the safety of the occupants.
- 2. Prolonged exposure to water can lead to corrosion of the reinforcement steel within the concrete, compromising the overall strength of the basement structure and the
- 3. Constant waterlogging can weaken the concrete structure, leading to spalling, cracks,
- 4. Water accumulation can cause hydrostatic pressure against the basement walls, leading to seepage, cracks, or even structural failure if left unattended.

- 5. Any electrical installations in the basement, such as lighting systems, wiring, or electrical panels, are at risk of short-circuiting due to water exposure, posing a
- 6. Waterlogging can also damage underground utilities like pipes or cables, further
- 7. Stagnant water poses a risk of accidents due to slippery surfaces, particularly in parking areas where vehicles and pedestrians frequently move.
- 8. Standing water can become a breeding ground for mosquitoes and other insects, increasing the risk of vector-borne diseases for building occupants and nearby
- 9. The waterlogged parking area affects the usability of the basement. Residents or visitors may find it difficult to park their vehicles safely due to waterlogged spots. The area may also pose a challenge for vehicle movement and maintenance.
- 10. The long-term presence of water can damage vehicles, particularly their electrical systems, tires, and undercarriages.

Recommendations:

- 1. A professional contractor should be engaged to regrade the entire basement floor to provide an appropriate slope toward existing or newly installed drainage outlets. The slope should be at least 1-2% to ensure effective water flow.
- 2. If not already in place, install a comprehensive drainage system that includes floor drains at strategic locations throughout the basement, connected to stormwater
- 3. Regular maintenance and cleaning of drainage outlets to prevent clogging.
- 4. Waterproofing of basement walls and floors should be reviewed and repaired where necessary. This might include the application of waterproof membranes, sealing of joints, and injecting chemical waterproofing agents where seepage is evident.

Attachments:



We are also attaching a Ziplock cover with a pend drive containing the videos of the defects listed out in the reports above, which have already been shared with you by email earlier.

	Yours Sin	NO NAME SIGNATURE
1	B 713	M. Anand Kumar
2	B 506	Prasenjit Das Donnseyn
3	A 415	Col. L.S Sundaram
4	A 515	V.V. Ramana Murthy Paga 7
5	A 316	Chandan Dutta
6	B 613	Angad Singh Nijjar
7	B 307	Dennis Anthony
8	A 304	Seeho Sei B
9	A 602	K. Sai Charan Process
10	B 611	R. Sarada
11	B 513	Tabitha Prem Kaza
12	B 706	Tulshi Pandey
13	B 413	Aashish Sikka Denil like
14	B 313	Divya Uday Divy
15	A 605	
16	B 406	Madhu Gangadhara / Kiron Kumar Gangadhara glub. Rani Singh
17	A 516	Rani Singh Rani Singh
18	A 305	Pradeepta Kumar Sahu Sah ML
19	A 314	Raveendra Raju Santam
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