Urbana Residential Phase 1 Inspection Report

Inspection Date : 28th June

INTRODUCTION

- Upon receiving several observations from residents of Urbana I, regarding water percolation through the windows during the recent heavy rains. Joint site visit was organized on 28.6.2024 to assess the situation at the affected areas and some more areas in general.
- We met with several residents who had reported the problem, listened carefully as each resident described the nature of water infiltration they experienced during the storm. they were concerned about the potential damage to the windows.
- The inspection of the windows was thorough, with the team closely examining the areas where water had seeped in. After a detailed assessment, it was determined that there were no signs of structural or technical failures that could have caused the water seepage. The window frames, seals, and glass panes were mostly intact.

OBSERVATIONS

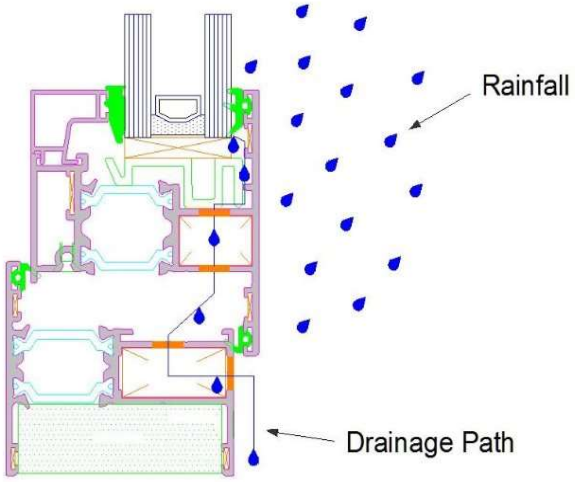
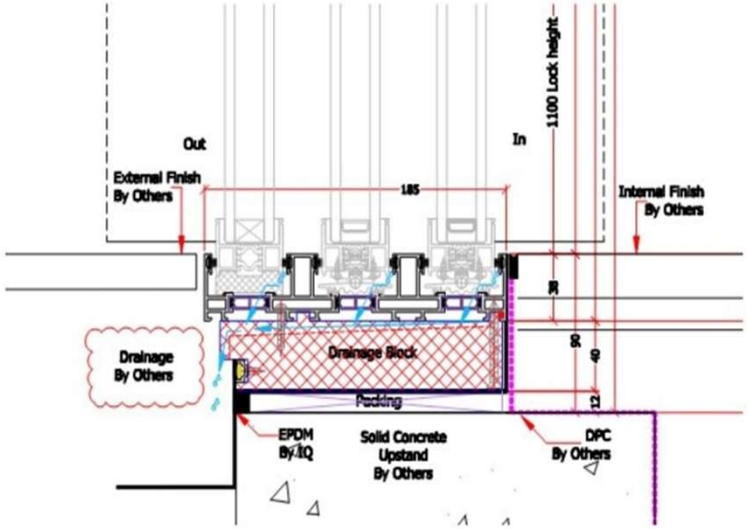
- **ROOT CAUSE:-**
- Majority of the cases due to rainwater entering through the sliding windows are not leakage but water spillage due to bubble effect created due to pressure difference. This effect happens occasionally due to difference of Temperature and wind turbulations. During certain days of year due to wind and temp difference the pressure outside the building is marginally more than the indoor pressure .
- Periodical servicing and maintenance deficiency.
- However, observed some wear and tear on certain windows, particularly those that had been exposed to harsh weather conditions over the years. This natural weathering had likely contributed to the minor issues experienced during the heavy rain.
- Improper alignment of window shutters due to operational deficiency.

- **SYSTEM REQUIRMENT:-**
- The collected water in the track should be drained from the holes drilled in sliding and casement windows.
- The track also must have its own water holding capacity in it.
- The draining capacity determines the volume of water the window can handle and drain the same.
- For sliding windows, the track should be clean to maintain holding capacity and avoid blockage of drain holes.

UPGRADATION

- **UPGRADATION MADE POST AMPHAN:-**
- Typhoon Lock, Alignment Block & Sash Shield incorporated.
- Window Shutter alignment adjusted, wherever required.
- Gasket replaced wherever required.
- Additional ‘End Dam’ created in few windows to increase water retaining capacity.
- Freshly Silicon applied around the Frame and junction between Glass and Shutter/Frame.
- Additional drainage point introduced to drain out the accumulated water.

IDEAL DRAINAGE CONDITIONS

CASEMENT WINDOW	*SLIDING WINDOW*
	

EVIDANCE OF SEEPAGE THROUGH SLIDING WINDOW

RECOMENDATIONS

- **RECOMENDATION:-**
- Additional drainage points to be created in fixed windows along with fixing of NRV valves.
- Additional drain caps to be installed.
- Incorporate ‘End Dam’ to increase water retaining capacity, where it is missing.
- Periodical servicing of the windows required like shutters, locks etc., so that alignment is proper.
- Proper and timely cleaning of window channels.