

**550 Front Street
San Diego, CA.**

INTRODUCTION

ABSTRACT:

Pinnacle Museum Tower
550 Front Street
San Diego, California

The above described structure is a 36 story residential tower with 3 subterranean parking levels.

GARAGE LEAKAGE ISSUES:

The upper garage (P-1) has site specific leakage conditions. The intermediate level (P-2) also has some site specific leakage conditions and other areas where site specific remediation is not feasible. The lowest garage level (P-3) has extensive and exaggerated leakage conditions which preclude site specific repairs. The photographs included with this report illustrate the leakage conditions and scope of repairs required to provide the Homeowners with dry and safe parking and storage areas.

DISCUSSION:

This report is generated in response to a request from Jim Roberts, President of the Homeowners Association and from Feinberg - Grant - Mayfield - Kaneda & Litt, Attorneys At Law to evaluate garage leakage conditions and provide a Defect Report. Additionally, the request requires a detailed and comprehensive Remediation Plan and Scope of Work.

Note:

ALL REPAIRS TO P-1, P-2 & P-3 GARAGES MUST BE MADE ON THE NEGATIVE SIDE OF WALLS & SLABS. THERE IS NO EXTERIOR ACCESS. THE ALTERNATIVE WOULD BE TO STABILIZE THE STRUCTURE, REMOVE THE STRUCTURAL WALLS, ELEVATED SLABS & SLAB ON GRADE, WATERPROOF & REBUILD.

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FINDINGS / OBSERVATIONS:

P-1 Garage Level = Noted 7 leak locations including inside the Electrical Room and inside a Mechanical Room.

P-2 Garage Level = Noted 26 leak locations including stairwells.

P-3 Garage Level = Noted 83 leak locations including stairwells and inside Storage Rooms.

WORKING HYPOTHESIS:

P-1 Defects can be remediated on a site specific basis.

P-2 Defects are such that a site specific remediation approach is feasible for some and other areas require a continuous, monolithic and uninterrupted Waterproofing treatment.

P-3 Defects and leakage conditions are so extensive that a complete continuous, monolithic and uninterrupted waterproof membrane is required on the West wall, East Wall, South Wall plus the entire Slab on Grade slab including storage and utility rooms & stairwells.

EVIDENCE:

- 1 Wall leaks from random concrete cracks
- 2 Wall leaks from failed construction joints
- 3 Leaks @ wall to elevated slab transitions
- 4 Leaks @ wall to slab on grade transitions
- 5 Leaks at the slab on grade joints
- 6 Leaks at the slab on grade random cracks
- 7 Damaged & delaminated coating on elevated structural slab @ P-2
- 8 Damaged & delaminated coating on structural slabs on grade
- 9 Extensive leaking @ diagonal cracks in the slab on grade
- 10 Active running water from slab on grade cracks
- 11 Active running water from wall joint cracks
- 12 Active running water from random cracks in the walls

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EVIDENCE: (Continued)

- 13 Lifting of traffic coating on the slab on grade
- 14 Active water leaks in the stairwells
- 15 Leaks @ slab on grade transition to structural column bases
- 16 Slab on grade leaks @ floor penetrations (Pipes & drains)
- 17 Leaking cracks in the overhead structural slab @ Museum - Leaking noted on 3/21/07 & 3/22/07 during Museum construction
- 18 Cracks leaking inside Mechanical Rooms
- 19 Leakage stains and cracks inside the Electrical Room
- 20 Leaks and stains from concrete soffits
- 21 Extensive leaks inside the Storage Rooms
- 22 Rusty water running out of locked storage cages
- 23 Private property moisture damaged inside the locked cages in Storage Rooms
- 24 Approximately 30 areas display prior repair attempts - most unsuccessful

CONCLUSIONS:

Our appraisal and leak survey leads to the conclusion that P-1 and some of P-2 garages can be repaired on a site specific basis. Portions of P-2 and all of the P-3 garage level must be remediated with a total and monolithic repair procedure. It is also clear that a piecemeal approach will move the water to untreated locations. The water intrusion is so widespread and exaggerated that anything less than a complete waterproof envelope at the P-3 level and portions of the P-2 level would be futile. It would be disingenuous to recommend spot repairs in most of the leakage locations based on the fact that unsuccessful site specific repairs have been tried. Portions of the garage levels are below the mean hi-tide line in nearby San Diego Bay thus hydrostatic pressure may be a factor.

*** **End of Preliminary Report** ***