



## ACI 362.2 – Revision/Update Guide for Structural Maintenance of Parking Structures

### Chapter 1—Introduction (D’Arcy)

Add text regarding responsibility for maintenance (D’Arcy)

### ~~Chapter 2—Developing a maintenance program (Wagner)~~

~~2.1—The project maintenance manual~~

~~2.2—Periodic inspections~~

~~2.3—Preventive maintenance~~

~~2.4—Conditional appraisals~~

### Chapter ~~2~~<sup>3</sup>—Deterioration problems associated with parking structures (Pulver)

~~2.1—Concrete-related deterioration~~

~~2.1.1—Scaling~~

~~2.1.2—Corrosion~~

~~2.1.3—Delaminations~~

~~2.1.4—Spalling~~

~~2.1.5—Cracking~~

~~2.1.6—Leaking~~

~~2.1.7—Leaching~~

~~3.2—Sealants and waterproofing~~

~~3.2.1—Contraction and construction joint sealants~~

~~3.2.2—Seals for isolation joints and expansion joints~~

~~3.2.3—Concrete sealers~~

~~3.2.4—Elastomeric, traffic-bearing membranes (ref. ACI 362.1 for addl. systems)  
(Nehil to provide added/revised text)~~

~~2.3—Structural elements and related items~~

~~2.3.1—Concrete deck surface~~

~~2.3.2—Beams, columns, and walls~~

~~2.3.3—Stair and elevator towers~~

~~2.3.4—Exposed metals~~

### Chapter 3—Protection systems (Pulver)

~~3.1—Contraction and construction joint sealants~~

~~3.2—Seals for isolation joints and expansion joints~~

~~3.3—Concrete sealers~~

~~3.4—Elastomeric, traffic-bearing membranes~~

~~3.5—Asphaltic overlay membrane systems~~

~~3.6—Plaza subsurface membrane systems~~

### Chapter 4—General maintenance considerations (Downs)

4.1—Housekeeping and cleaning requirements

4.2—Drains and drainage (Nehil)

4.3—Snow removal and ice control

4.4—Other operational maintenance

4.5—Aesthetic-related maintenance

4.6—Precast/prestressed concrete

4.7—Post-tensioned concrete

- 4.8—Cast-in-place, conventionally reinforced-concrete structures
- 4.9—Hybrid structures (Nehil)

**Chapter 5—Developing a maintenance program (Wagner/D'Arcy)**

- 5.1—The project maintenance manual
- 5.2—Periodic inspections
- 5.3—Preventive maintenance
- 5.4—Conditional appraisals

5.5. Table of maintenance tasks and frequencies

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~~Chapter 5—Maintenance tasks and frequencies affecting parking structure performance (D'Arcy)~~

**Chapter 6—Service life and resiliency (Church)**

- 6.1 —Definition of service life
- 6.2 —Maintenance options to prolong service life
  - a. Sealants and waterproofing
- 6.3 —Life Cycle Cost Analysis
- 6.4 —Resiliency

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**Chapter 7—References**

- 7.1—Referenced standards and reports
- 7.2—Cited references

**Appendix A—Snow removal (Downs)**

**Appendix B—Deicing procedures (Downs)**

**Appendix C—Checklist for structural inspection of parking structures (Wagner)**