

A guide of common items and practices that need to be done properly to avoid damaging a foundation.

Learn about what should be fixed right away. Read best practices for sprinklers, paving, pools, and patios. Understand preferred tree locations and how to use root barriers. Become more knowledgeable on grading and storm water drainage.

Use this checklist for discussions with:

- Designers
- Engineers
- Builders
- Pool Contactors
- Landscaping Contractors
- Foundation Contractors

For more information and details, read the FPA-SC-20-0 "OWNER'S GUIDE TO A BETTER FOUNDATION" paper and presentation at [foundationperformance.org](http://foundationperformance.org) published 25 February 2016

**Surface water management and soil moisture changes are at the core of many foundation issues.**

**Whether dealing with an existing foundation or planning for foundation, use this checklist to help better manage these issues.**

**This FPA-SC-20 Tri-Fold provides check list information as the subcommittee's interpretations of building codes and best-practices.**

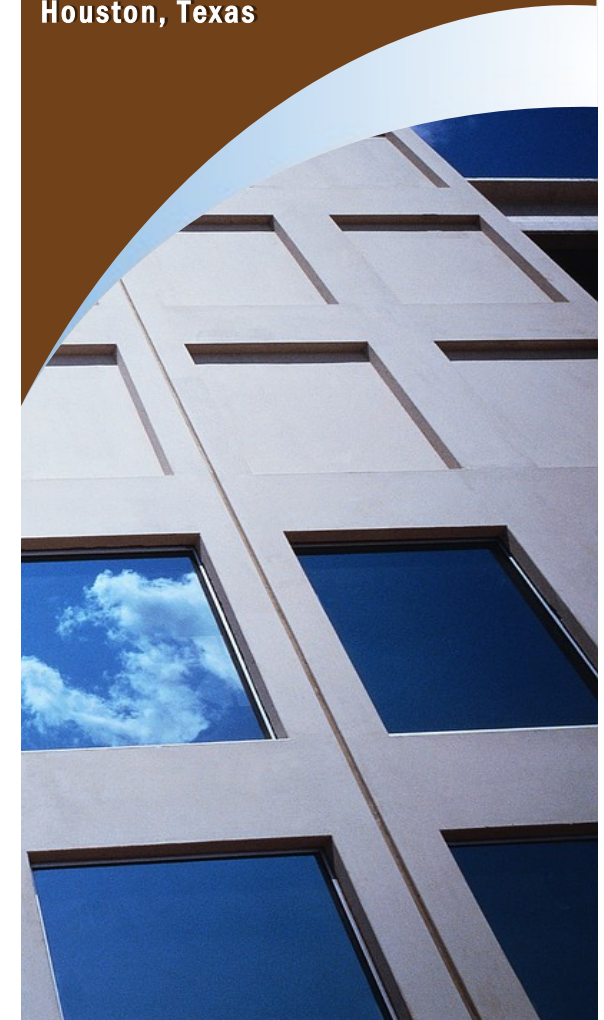
**We recommend to always consult with a professional engineer for foundation issues, drainage issues, or for the design of a specific drainage system.**

**This OWNER'S GUIDE TO A BETTER FOUNDATION Checklist is associated with the FPA-SC-20 Presentation and Paper developed by The Structural Committee of the Foundation Performance Association of Houston, Texas**  
[foundationperformance.org](http://foundationperformance.org)  
View the FPA-SC-20 Presentation  
[www.foundationperformance.org](http://www.foundationperformance.org)

## **OWNER'S GUIDE TO A BETTER FOUNDATION**

### **☑ CHECK LIST FLYER**

**The Structural Committee of The Foundation Performance Association of Houston, Texas**



## Owner's Guide Check List

REVIEW 'GENERAL CHECK & REPAIR', THEN VISIT OTHER SECTIONS FOR MORE DETAIL

☺Great! ☺Good ☹Fix It! ⓘInfo

### 1. GENERAL CHECK & REPAIR

- ☹ Does water drain towards or pond at the foundation edge?
- ☹ Is rain water from the roof or from a gutter downspout causing erosion?
- ☹ Does an air conditioner drain adjacent to the foundation?
- ☹ Is there a leaking sewer or water line near or under foundation?
- ☹ Is there a pool or pool piping leak?

### 2. IRRIGATION SYSTEMS

- ☹ Are drip irrigation lines too close to foundations, or do sprinkler heads spray on foundations?
- ☹ Are irrigation systems or sprinkler systems ponding near the foundation? (Check valve boxes)
- ☺ Is a soil moisture or rain sensor installed?  ☹ No (ⓘ Overwatering?)
- ☺ Is the controller properly programmed
- ☹ Under-watering or Over-watering?

### 3. PAVING AND FLATWORK

- ☺ Does all paving and flatwork drain away from the foundation?  ☹ No
- ☺ Are paving and flatwork joints sealed next to your foundation?  ☹ No

All ☹ items have been fixed = ☺

## Owner's Guide Check List

### 4. POOLS & POOL PATIOS

- ☺ Pool patios <10' from foundations should slope away at 1" to 2" per 8' (1% to 2%) and then discharge 5' away.
- ☺ Surface or slotted drains, if used, discharge 5' or more from the foundation.
- ☺ Pool piping is glued or gasketed, not dry fit, and pressure tested before completion of installation.
- ☹ Pool landscaping soil has a drainage path away from foundation. ⓘ If not, the soil can become saturated between pool and foundation. ☹

### 5. TREES & VEGETATION

- Large trees (Mature height 20' or taller)
  - ☺ Plant 12' to ☺ 20'+ from foundation.
- Small trees (Mature height 10' to 20')
  - ☺ Plant 8' to ☺ 12+ from foundation.
- Shrubs & bushes (Mature height 4' to 10')
  - ☺ Plant 2' to ☺ 8' + from foundation.
- Flowering plants & herbs - can plant ☺ close to foundations (ⓘ allows better maintenance access).
- Also use grass, mulch, and annuals for <2'. ☺
- ⓘ New pier & beam crawl space structures may be less damaging to existing nearby trees.

### 6. ROOT BARRIERS

- Are solid root barriers planned by the owner?
- Are chemical root barriers planned by the owner?
- Are root barriers to be installed by the owner at the time of planting? \_\_\_24" \_\_\_30" \_\_\_36" deep.
- ☹ Are large trees planted closer than 12' from foundations without root barriers?

All ☹ items have been fixed = ☺

## Owner's Guide Check List

### 7. LANDSCAPING & GRADING

- ⓘ The lowest floor should be 6" or more above the adjacent landscaping soil or mulch. This can be 12'+ above the foundation supporting grade.
- ⓘ For a crawl space foundation, landscaping soils / mulch should be 6" or more below flood vents.
- ⓘ In flood prone areas, the first floor level should be at least 12" higher than the base flood elevation.
- ⓘ Water < 10' from a foundation should flow away using: (a) a minimum protective slope of a 6" fall within the first 10' (a 5% slope); or (b) a 1% to 2% slope for impervious surfaces; or (c) 3" to 6" drainage piping slopes at 1/8" per foot (a 1% slope).
- ⓘ Compacted clay soil used under landscaping beds should drain away as described above.
- ☺ Landscaping drains away from foundation.
- ☺ Rock / Gravel beds are not next to foundation
- ☹ Landscaping does not drain correctly.

### 8. STORM WATER DRAINAGE

- ⓘ Is an engineer stamped drainage plan required ?
- Does rainfall either pond or create erosion near the foundation?  ☹ Yes  ☺ No
- Do downspouts connect to pipes or swales?
- ☹ No.  ☺ No, splash blocks are used.
- ☺ The drainage plan is engineer sealed.
- Does the roof's storm water drain 5' away ?
- ☹ No.  ☺ The site drains away from the foundation. The grade falls 6" within 10' (a 5% slope), or all flatwork slopes 1" to 2" per 8' (1% to 2% slope). Drainage piping slopes at 1/8" per ft (1%), or it has catch basins and clean-outs for owner maintenance.

All ☹ items have been fixed = ☺