

Hardscape

The hardscape around your home may include walkways, patios, and other surfaces. Patios and walkways, if installed by GHO Homes Corporation, have been designed to meet the soil conditions and drainage patterns of your lot. If you add a patio or walkway as an improvement there are several very important things to remember.



Backyard Patio

General Guidelines

- **Weep Screed Line**

Do not pour a patio slab higher than 2–3 inches below the house foundation (weep screed line).

- **Proper Drainage**

Provide a drainpipe or other means of drainage when patios or walks cross flow lines. Do not allow water to collect against your house or behind walks or planters.

- **Expansion Joints**

Concrete surfaces such as driveways, sidewalks, and patios generally have expansion joints to reduce cracking. There should also be an expansion joint between the edge of these surfaces and the face of the foundation of the house. These joints are sometimes filled with 1" x 4" treated lumber that is set between the adjacent concrete. The joints can also be formed with a variety of sealants and or expansion joint filler.

- **Underground Utilities**

Confirm the location of underground utilities *prior* to the planning and excavation of any hardscape features.

- **Maintain a Slope**

Always slope concrete away from house (2% slope: 1/4 inch drop for every 12 inches of length) to a drain or swale.

- **Hire Professionals**

Contract a licensed contractor and professional engineer who is knowledgeable about the building code requirements and soil conditions for your area. There may be structural reinforcements necessary for your improvements. Note that most municipalities require designs to be signed off by a licensed, professional engineer. Sidewalk and driveway construction details may be mandated by your municipality.

- **Get Necessary Approvals**

Obtain necessary approvals and permits from appropriate governmental agencies and your HOA's appropriate committee (if your community is governed by an HOA).

- **Permeable Paving Materials**

Consider using permeable paving materials, such as pavers or porous concrete, which allow water to seep into the ground rather than run off into storm sewers or pond on the pavement. Avoid using asphalt (a petroleum product) or other dark paving materials, especially in regions with hot summers. Dark materials absorb heat from the sun; on hot days this can contribute to a "heat island" effect around your home, which can increase the need for air conditioning. If adding concrete, consider using a white or grey concrete, to help reduce the summer heat island effect.

CONCRETE SURFACES

The concrete surfaces include your driveway, garage, walkways, and patios. Walkways are the concrete sidewalks leading to your front door and backyard. Promptly repair walkways with hazards such as lifting and ponding of water. Tripping hazards should be promptly corrected.



Expansion Joint in Concrete Walkway

Important Information

- **Stain Removal.** Remove grease/oil spots from driveways with concrete cleaners from your hardware store.
- **Prevent Heavy Loads.** Do not permit heavy equipment, such as concrete trucks or moving vans, to drive on your concrete, as it was not designed for heavy loads.
- **Joint Fillers.** The joint filler in the expansion joints will deteriorate over time. The life of the filler may be dependant on environmental conditions such as the amount of rain or ultra violet radiation, or the amount of movement. Failure to replace these deteriorated joints will allow excessive water intrusion to enter the joints, eventually undermining the soils under the slab, and will cause these sections of concrete to shift vertically.
- **Expansion and Settling.** Concrete is a very hard type of material. However, small cracks due to expansion and settling are common. Seal cracks to prevent water penetration that can worsen the crack. Another element of concrete is spalling. Spalling occurs when the top layer of concrete begins to flake or wear away.



Caution: If chipping, lifting, separating, and cracking is discovered, determine if the cause of this condition may be related to roots that should be controlled or removed, or a drainage-related concern. Resolve the contributing factors to prevent future problems.

Recommended Maintenance Tasks	Frequency
Hose off walks. Schedule to coincide with mowing or other maintenance.	Quarterly
Inspect concrete for chipping, lifting, separating, and cracking, which can create a safety hazard that may result in homeowner liability.	Annually
Check the walkways adjacent to exterior walls for settling that may change the slope away from the house.	Annually
Examine the expansion joints in patios and walkways and replace the joint filler as needed. Ensure that the joint filler adheres to both faces of the concrete, and is not sagging, crumbling, or cracking.	Annually

Effects of Deferred Maintenance

Failure to adequately maintain the concrete around your home may create safety hazards. Serious cracks or fissures in walkways that remain unrepaired are a potential liability to you as the homeowner.

PAVERS

Pavers are bricks laid over sand and earth and add a warm and elegant appearance to your landscaping. They require very little maintenance.



Driveway Pavers

Recommended Maintenance Tasks	Frequency
Inspect to ensure that the bricks remain level. Reset uneven or loose bricks.	Annually and as needed
Clean oil stains left by vehicles.	As needed

Effects of Deferred Maintenance

Failure to maintain may lead to early deterioration of pavers and diminish your home's appearance. Uneven pavers can cause trip hazards.