



## **CITADEL AT MAGRATH – RETAINING WALLS**

The retaining wall on your property was constructed to make your yard more usable. It is constructed of Pisa 2 concrete block as manufactured by Expocrete. The following information is intended as a guide to protection of the wall's stability and the long term quality of its appearance.

Retaining walls, like everything else on your property, require care and maintenance. With any newly built retaining wall, there are maintenance aspects that are important to watch for after the wall is completed. The major wall maintenance items include:

### **1. SITE GRADING**

Every newly built retaining wall has soils - backfills that are placed behind and sometimes below the wall and compacted during construction. It is quite common for some extra settling to take place after the wall is completed. If you inspect the wall each spring for any unusual or excessive settling, you can save your wall from a potentially large problem.

All retaining walls should be designed and built to route water around or over the wall face. Once an area behind the wall begins to settle, water goes to work to make that area deeper and bigger. If a low spot is neglected behind a wall, each new rainfall will collect water at that spot and work its way down behind the wall. And this pooling effect will also turn the soils soft and mushy. If the wall wasn't designed or engineered to hold up the added weight, a blow-out could occur.

Preventing this problem is easy. Inspect your wall each spring. Look for low spots and areas that have settled. Pull back the landscape mulch or sod on the surface and add enough new fill to bring the drainage back to its proper level.

### **2. SURFACE TREATMENTS/GROUND STABILIZATION**

Another common maintenance problem with retaining walls is the lack of proper surface treatments to stabilize the ground. The surface areas above and below the wall are typically finished with mulch, sod or some type of ground cover. These surface treatments stabilize the ground to reduce the potential for surface erosion.

These surface treatments will need to be checked each spring until they are completely established. Look for areas of erosion, ruts and channels on the surface, and re-landscape as necessary.

A line has been painted on the lower portion of your wall. This line is the height at which the adjoining soil level should be maintained. Retaining wall blocks below this line should be covered with soil to protect the wall's foundation.

### **3. PROTECTION OF AREA BEHIND THE WALL**

The wall has been designed to support the existing load behind it. Do not add structures (paving, sheds, playground equipment, etc), boulders or water features behind the wall. Disturbance of the existing ground behind the wall should be minimized.

### **4. WEED GROWTH**

Just like with concrete and asphalt pavement, an occasional weed can find growing in the face of stackable block retaining walls. If allowed to stay in place, one weed can multiply. By plucking the odd weed that finds its way into your wall, you will keep the wall weed free for life.

## **5. DRAINAGE BEHIND THE WALL**

The retaining wall has been built with weeping tile behind it and perforated drainage pipes exiting in various locations. Do not remove any of the weeping tile or block or cover any drainage piping.

## **6. WALL PERFORMANCE**

If drainage or erosion problems are not corrected, some wall movement could occur. We recommend a spring inspection of the wall looking for any movement, bulges or rotation. If you see any significant forward movement or rotation in your wall, arrange an inspection by a professional.

If a soft spot was not properly compacted at the wall base, you could see some minor settling of the wall. Minor settling will not hurt the structural integrity of the wall. However, if it happens, you may wish to un-stack the blocks in that area, raise the settled spot at the wall base, and restack the blocks.

The walls are connected and cross over individual properties. If repairs are required, ensure that the new section of wall is built in the correct alignment to maintain the overall integrity of the wall

## **6. Maintenance Tips**

**Follow these simple wall maintenance steps:**

- *Make a thorough annual inspection of the wall.*
- *Correct any settling or grading problems around the wall.*
- *Maintain the landscape surfaces above and below the wall to the correct level. The finished grade of landscape below the wall should be at least up to the line that is painted on your wall.*
- *Take notice of any wall movement - settling, bulging or rotation, and then take proper corrective measures.*
- *Control any random weed growth as necessary.*
- *Avoid use of salts or de-icers around the wall.*
- *Ensure that drainage holes are not blocked or covered; drainpipes for positive drainage are critical.*
- *Channel water away from the surface and interior of the wall.*
- *Keep heavy equipment away from the wall, especially the area behind the wall.*
- *Be aware that excessive irrigation behind the wall could lead to soil saturation problems. Irrigation behind the wall should be minimised through use of plant species with low water requirements.*

Credit – some of this information has been sourced from <http://allanblock.com/ca/canada>