HILFIKER RETAINING WALLS

MSE WALL MAINTENANCE AFTER INSTALLATION

- Subsurface water has a significant impact on the stability of any earth retaining system. Many homeowners prefer lush landscaping with its associated reliance on watering. Landscape irrigation while necessary, should not be allowed to the extent that it saturates the subsurface soils.
- The importance of controlling subsurface water varies with the type (if any) of subsurface drainage that is installed behind the wall. If swimming pools are constructed behind the limits of the wall, positive drainage should be provided to prevent leaks from affecting the wall. Additionally, gutter drainage should be collected and directed away from the wall reinforcing area.
- Like subsurface water, surface water can be detrimental to the wall. Surface water should not be concentrated and directed over the face of the wall.
- If the wall was built with a drainage system behind the wall, observation with annual maintenance should be practiced to assure that this drainage system is working, does not become clogged or blocked.
- With regard to the landscaping itself, our recommendation is to avoid very tall trees or plantings near the face of the wall that result in large wind loads. That is not to say that landscaping cannot be on top of the wall, but at the same time, trees 20 - 30 feet tall are not a good idea. If preplanned, large penetrations and loading (such as tall trees) can be accommodated in the design phase prior to materials production much more easily than retrofitting after the wall is built.
- Be aware that the top soil reinforcements are only 18 inches below the ground. Any excavation
 into the soils above the wall needs to be carefully done so that it does not damage the soil
 reinforcements. In addition, removal of the soil from above the soil reinforcements should not be
 allowed.
- If the surface of the ground slopes away from the toe of the wall, care should be taken such that the wall embedment remains constant and is not subject to scour or eroding influences.
- The bottom line is that common sense needs to be used for activities that introduce significant water or loads to the wall. When in doubt, always feel free to contact our office with any questions.

DAMAGE TO WALL FACE AFTER INSTALLATION

As an owner, you don't like it, and as a manufacturer, we don't like to see something like this happen to the face of our wall... But it happens and now you need some guidance (from the material manufacturer) as to how best to repair the damage and stop any further raveling of the wire face.

Typical repair recommendations for a situation such as this would be:

- Attempt should be made to straighten any bent wires, without breaking them.
- Confinement of the undisturbed backfill material is a priority. Do not allow any wash down procedure to occur in this area. Keep surface water away to prevent the loss of any more fill.
- Repairs that would fill the void could include the placement of shotcrete or hand-packed mortar, or forming the face and filling the void with lean concrete, cellular concrete, foam or a similar material.
- Finally, some wire of similar coating could be 'patched' over the damaged area.

However, in some cases, the Engineer for the wall design may also need to review the damage and provide their recommendation along with their assessment for the structural integrity of the wall. Hilfiker can assist in providing our consulting Engineer's input, if the design was provided from Hilfiker initially.

Damaged Wall Face



Patched with Wire

