

# Quality Inspection Checklist



**CORNERSTONE**  
WALL SOLUTIONS INC.

This inspection list is a tool that can be used by Owners, Contractors, Inspectors and Engineers as a quality control guide for the retaining wall project prior to and during installation. This list will help assure that construction is in accordance with design tables, installation guidelines and specifications. Not only should the inspector review all aspects of the structural quality but also the quality of the aesthetics of the project. It is recommended that photos are taken to document the project from start to finish.

## Recommended photos taken during construction

1. Trench for Leveling Pad
2. Leveling pad completion
3. At each course of block
4. At each layer of compacted backfill
5. At each layer of installed geogrid
6. The finished project

## Prior To Construction Verify

- Site design drawings and specification documents.
- Utility location details.
- Site elevation grading details.
- List of project products and attached specifications  
Qualified engineered stamped designed package.
- During construction site water control plan.

## General Excavation

- Locate and mark all utilities, etc. before starting excavation.
- Call local gas companies before excavation.
- Excavation of base leveling pad and wall reinforced zone meets construction drawings and specifications.

- Excavated back-cut has been terraced to follow engineer specifications or in accordance to OSHA requirements (site specific exceptions may apply if approved by engineer).
- All water issues that have been uncovered due to excavation for the wall have been addressed and taken care of.

## Site Survey

- Locations and elevations of all stakes should match construction drawings.
- Each base elevation change should have corresponding stake.
- Foundation soils should match or exceed design assumed types and strengths.
- Retained soils should match or exceed design assumed types and strengths.
- Site soils should not be frozen.

- Wall heights do not exceed design.
- Slopes above and below wall do not exceed design.
- Loading should not exceed design.
- Site water conditions should match the design.

## Foundation Soils and Preparation

- The sub-grade soils meet the minimum requirements as by the specified soil type.
- Any sub-grade soils that are unsuitable have been removed and replaced.
- The replaced or disturbed sub-grade soils must be compacted to 95% Standard Proctor Density.
- All changes have been documented and noted on the construction drawings.

The following checklist is a tool to help assure that all aspects of the retaining wall project have been properly constructed. Not all items in this checklist will be applicable for all projects.

## Base Leveling Pad

- Base leveling pad gravel is as specified in installation guidelines.
- The base leveling pad depth and width is in accordance with installation guidelines.
- The compaction density meets the requirements of the specifications.
- The base leveling pad is level horizontally and back to front.
- The minimum burial depth of the base leveling pad at each elevation base change and that the location meet construction drawings.
- The base stabilization fabrics installation is in accordance to the installation guidelines.

## Drainage/Unit Infill

- Drainage gravel should be 1/2 to 3/4 inch clear crush gravel with no fines.
- Clear crush gravel should be filled into all unit voids.
- Unit voids should be filled no more than one (1) course at a time.
- Perforated drainage pipe (if needed) should be sloped properly and daylight at proper intervals.

## Geosynthetic Reinforcements

- All reinforcements should be placed in the correct orientation.
- Reinforcements should be placed at the proper horizontal levels in the wall.

- Reinforcements should be of correct length as shown on design.
- Reinforcements should be properly connected to the units.
- Reinforcements should be properly tensioned before backfilling retained soils.
- Equipment should not be driven on the reinforcement.
- Reinforcements installed in curves, corners or other special applications should follow the design details or as per geosynthetic manufacturer's specification.

## Geosynthetic Fabrics

- Geosynthetic fabrics should be used as per installation guidelines.

## Block Units

- The delivered and installed units are the same as indicated on the construction drawings and specifications.
- The unit size, color, and dimension tolerances meet or exceed the minimum requirements.
- Units are level side to side and front to back.
- Units are placed tightly to each other.
- Units setback and alignment should be checked and corrected on each row.

- All units are sound and free of cracks or other defects.

- All unit connectors should be properly engaged.
- Soils should not be frozen.
- Soils should be at ultimate moisture (not too dry or too wet).
- Soils should be compacted in lifts not greater than 6-8 inches and to 95% Standard Proctor or greater.
- Soils on SRW geogrid layers should be flat and level to the top of the units.
- Soils should be placed and compacted to 95% Standard Proctor at the front or toe of wall to the design wall burial depth.

## Top of Wall Units

- Cap units as per design.
- Capping units should be adhered to the last row of units using SRW adhesives and with adequate surface adhesive coverage.

## Above and Below Wall Finish Grading

- Final grades should meet design plans heights and tolerance.
- All grades, slope lengths and drainage swales should be in accordance to the design.
- Temporary erosion controls should be in place until final surface treatments have been established.