Steps

There are numerous configurations that incorporate steps into a retaining wall. The most common is where the steps begin at the base of the wall and go up through the wall to the top grade. It is important to note that when stacking steps on top of each other, the actual change in elevation from the top of the first step to the top of the second step, and so on, can be more than the 6.5-inch height of a step due to the slightly uneven texture on the top of the step, the thickness of the glue used between the steps, and some tolerance variation in the production process. If the actual finished elevation of a step or a landing within the steps is critical, it is recommended that the design assume 7-inches of rise per step (not 6.5-inches). See ReCon Drawing #702, Steps, for further clarification.

Independent Pedestrian Railings, Fences, and Traffic Barriers

Independent railings, fences, and barriers placed behind a ReCon wall (not attached to or a part of the ReCon blocks) may effect the design of the retaining wall. Please refer to the Design Considerations portion of this manual for additional information regarding design.
When constructing independent railings, fences, and traffic barriers, it is important that there is coordination between the wall installer and the contractor that will be installing the independent railing system. This will ensure that both are installed in the most efficient manner possible.

In the case of geogrid reinforced walls, installation of the sonotubes for the railing, fence or traffic barrier will be dependent on various site conditions. If the first layer of geogrid is deep enough below grade and/or the diameter of the hole required is small enough, it may be suitable to auger the holes after the wall installation is complete. Otherwise, installation of the sonotubes will need to coincide with the wall and geogrid installation with the grids being cut to fit around the sonotube.

**Integral Pedestrian Railings and Fences**

ReCon units can be manufactured to accommodate certain types of railings or fences that are attached directly to the ReCon block. See Design Considerations: Integral Pedestrian Handrailings and Fences in this Manual. Again, the railing or fence should be designed by a qualified engineer before wall construction begins since these structures may impact the design and/or the construction of the wall. The retaining wall installer should specify in the scope of work portion of their quote, whether or not they intend to install the railing or fence. See ReCon Drawing #401 and #402 for additional installation information.

**Staining and Sealing**

The ability to stain a ReCon wall is an attractive benefit to owners and specifiers. When applied by experienced professionals, modern day concrete stains combined with the realistic stone appearance of the ReCon textures, can render a finished ReCon wall nearly indistinguishable from natural stone.

There are a variety of products that can be used to stain a concrete surface. They range from water born concrete stains, acid etch stains, to hybrids products that combine features of both. Water born stains are the easiest to apply and are environmentally friendly. They come in a wide range of colors, from light tans to deep brown, gray, charcoal and even black.
Customers typically want to match the look and color pallet of existing natural stones that have already been incorporated into the site. Thus, it is recommended that the customer provide to the staining contractor a sample of the natural stone that they want to replicate. The contractor can then stain several ReCon blocks that are already incorporated into the wall, showing the customer a range of options intended to meet expectations. Selection can be made on site and the balance of the wall stained accordingly. Most ReCon walls that are stained utilize a multi-color stain approach which has a base coat and several highlight colors. For specification purposes, the number of highlights desired should be disclosed, as each highlight will add slightly to the cost of the staining process. For example, the specification may indicate “a base coat and two highlights”.

Acid etch stains require an additional degree of care and skill to properly apply. Acid etch stains create deep colors (usually dark browns and rusts) and a natural variation in the color which adds to the authenticity of the finished wall appearance. For additional information on acid etch stains and hybrid stains, please contact ReCon.

Please note that the staining of a ReCon wall is an aesthetic option. It is not necessary from a durability perspective.

Sealing is an option where it may be desirable to minimize moisture absorption or add protection against the adverse impact of road salts, although most ReCon walls are not sealed.

Please consult ReCon’s website, www.reconwalls.com, and ReCon’s Specification for more information regarding staining and sealing. Application of all stains and sealers should follow the manufacturer’s recommendations.

**Construction Documentation**

It is recommended that wall installers create and retain thorough documentation of their work. This may include foundation soil testing, backfill compaction testing, and photos of wall construction; from base of wall to placement of the impermeable soil cap at finished grade. Documenting that the construction of the wall was completed in accordance with the stamped shop drawings and ReCon’s installation instructions and guidelines, is a step that demonstrates a commitment to quality and will differentiate the installer from the competition.