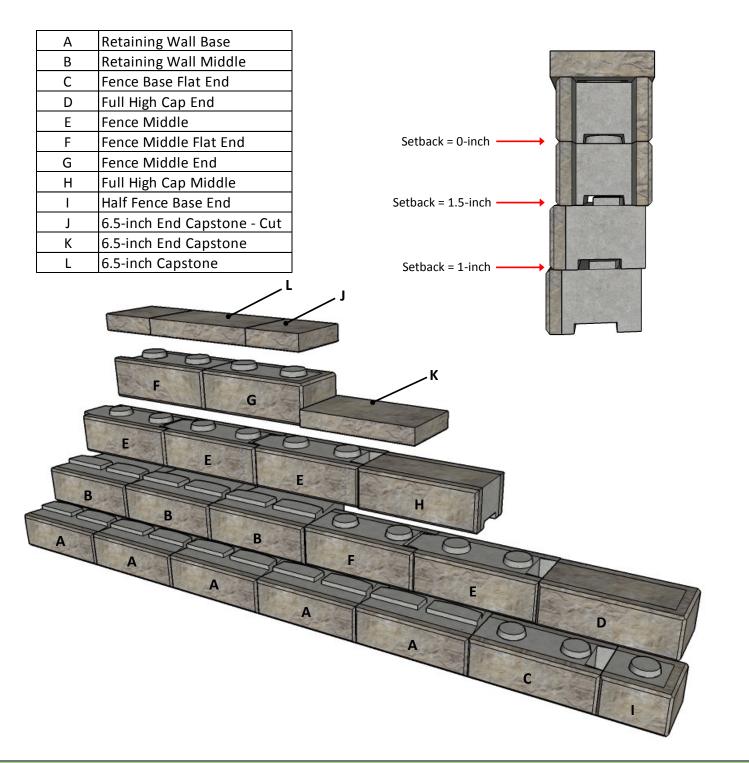
## **Fence and Guardrail Block Walls**

## **Independent and Integral Free-Standing Walls**

The construction of an independent or integral free-standing wall is similar to that of a ReCon retaining wall in terms of foundation preparation and block placement. For further information, refer to the retaining wall construction section of this manual or the Fence Block Specification and Installation Instructions found on our website.

With respect to integral free-standing walls, it is important to maintain retaining wall block levelness from front-to-back as the wall is constructed. This ensures that the first Fence Block course will be installed level as well.

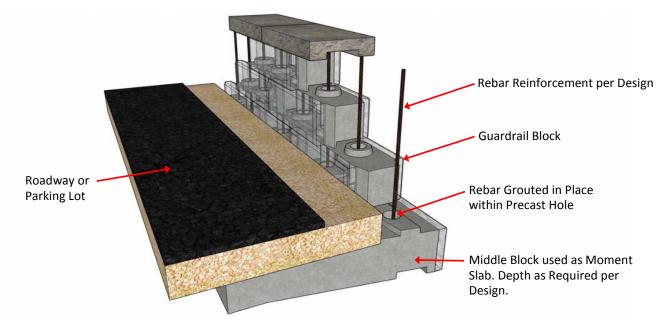




### **Traffic Barriers**

The construction of a traffic barrier utilizing the ReCon Guardrail Block consists of rebar reinforcement placed into grouted cores. It is critical that the cores align vertically and that the rebar and grout are properly sourced and installed. For further information, refer to the retaining wall construction section of this manual or the Guardrail Block Specification and Installation Instructions found on our website.

With respect to integral Guardrail Block walls, it is important to maintain retaining wall block levelness from front-to-back as the wall is constructed. This ensures that the first Guardrail Block course will be installed level as well.



#### Curved Walls - Fence Block

Introducing a curve into a fence wall, especially when the wall product is 24-inches thick, can create some challenges. The design and configuration of the ReCon Fence Block was intended to balance versatility with ease of construction and great aesthetics. The end-to-end tongue and groove design of the ReCon Fence block allows the contractor to construct curved walls without needing to cut each block along the curve.

Along the outside curve side of the wall, there will be a small opening between adjacent block face textures. The tighter the radius, the greater this opening will become. However, because of the tongue and groove design, the opening will not appear as a visible crack or gap from either side of the wall.

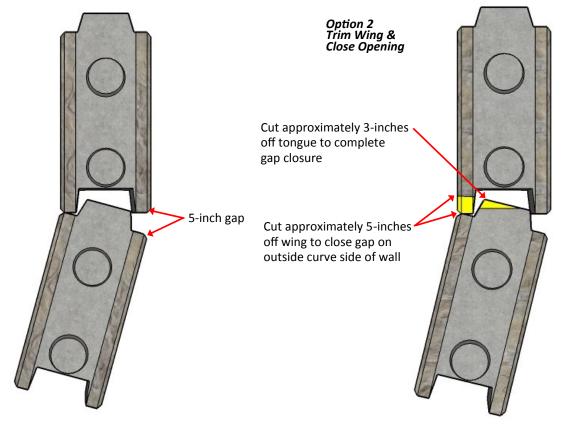
If, however, the customer does not want this small opening, then the installer can simply cut the block "wings" along the inside curve side of the wall to eliminate or reduce the opening on the outside curve of the wall. Cutting the block wings, which is a 4-inch thick section, to close this opening is much easier and quicker than miter cutting through an entire Fence block that is 24-inches thick. In some cases, a small portion of the adjacent block's tongue will need to be removed as well.

The drawings on the following page show the size of the opening that results when a wall has a 15-foot and a 25-foot radius. These drawings also show the approximate amount of trimming that would be required if it is desired to close the opening.

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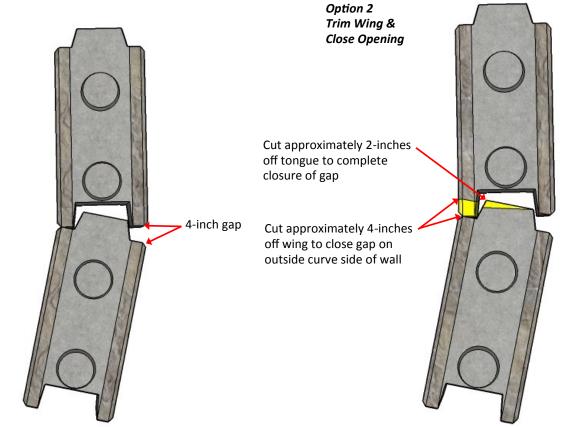
#### 15-foot Radius

Option 1 Leave Opening



#### 25-foot Radius



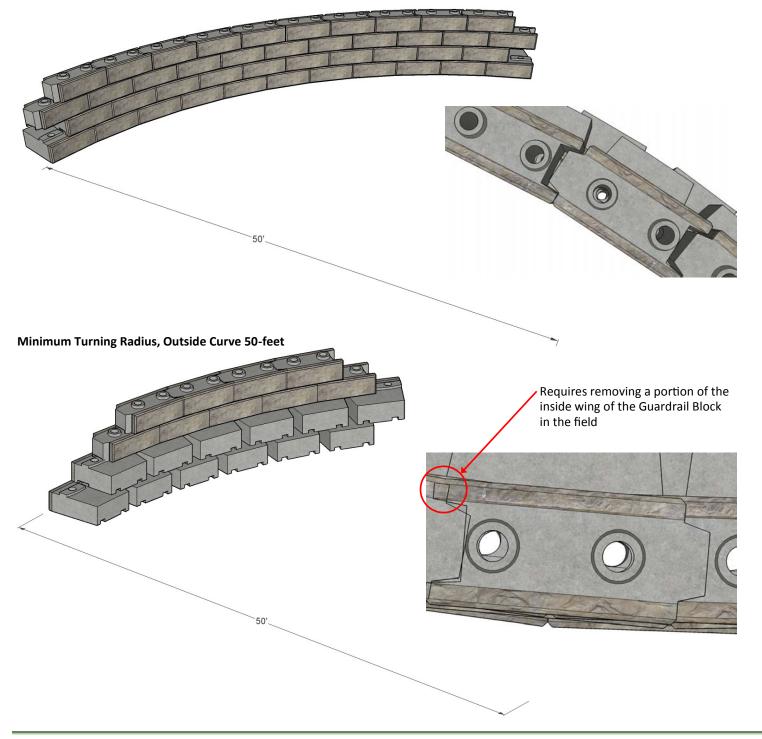




#### Curved Walls - Guardrail Block

When constructing a traffic barrier along a curved wall, using ReCon's Guardrail block, block alignment is critical. Each of the Guardrail blocks is precast with two 6-inch diameter holes through the block that are spaced 24-inches apart. These holes must align vertically to allow for proper installation of rebar and grout. As the radius of the curve becomes tighter, alignment of these holes becomes more of a challenge. For this reason, the minimum radius for both inside and outside curves should be limited to 50-feet. If your project requires a traffic barrier along a wall curve, please contact ReCon for additional guidance as some block cutting and/or core drilling may be required. For information on the grout to be used in the reinforcing holes, please consult the Guardrail Block Specifications and Installation Instructions available at **www.reconwalls.com**.

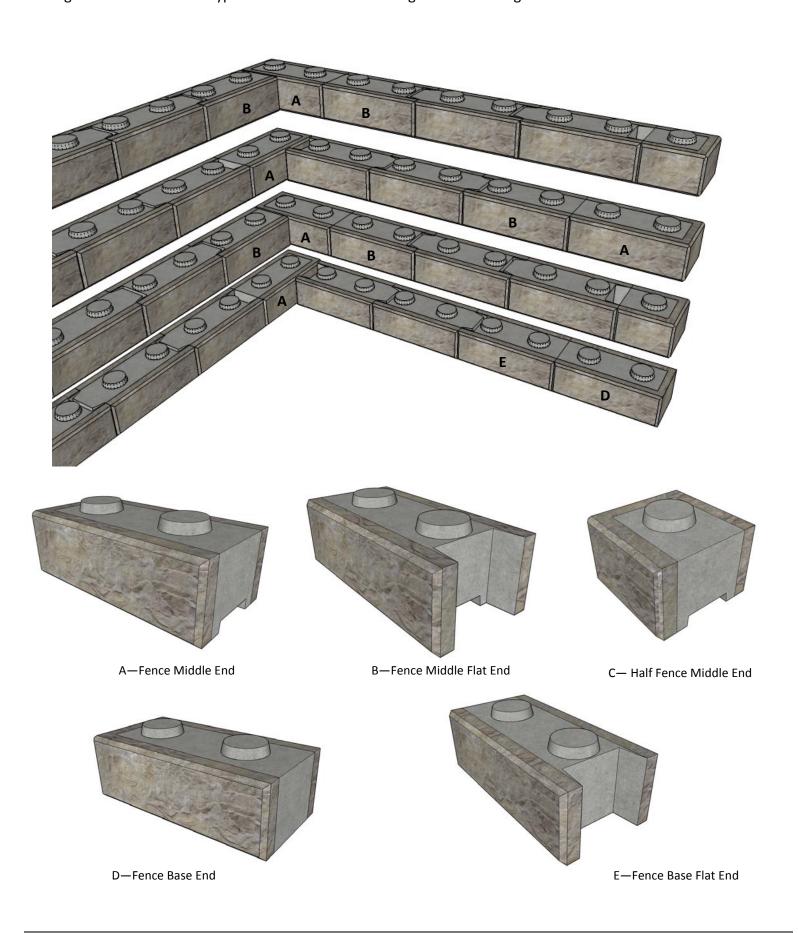
#### Minimum Turning Radius, Inside Curve 50-feet



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# 90-degree Corners

The figure below shows the typical construction of a 90-degree corner using ReCon Fence block.





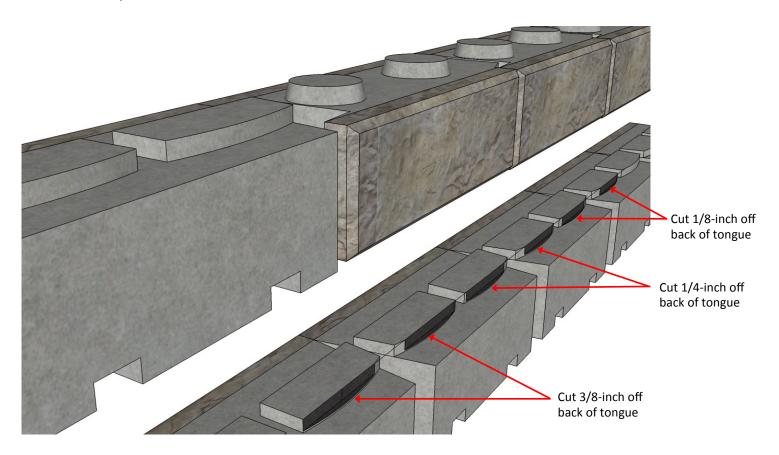
#### **Course Transition**

When a ReCon Fence block is placed on top of a ReCon Retaining Wall block, the initial set back in the first course between Retaining Wall Block to Fence Block is 1-1/2-inches. Thereafter, any additional courses of Fence block will go up vertically.

If the wall is level along the top, meaning there is no change in elevation at the top of the wall for the entire length, it is recommended that the Fence block be placed on the Retaining Wall block and the 1-1/2-inch setback be allowed to remain in the wall. It is not significantly noticeable, and from a design perspective it has very little effect.

Often, however, the top of a ReCon wall will change in elevation. In this case, there will be locations along the wall where the same course of block transitions from Retaining Wall to Fence block. When the first Fence block is set on the top of a Retaining Wall block, the setback will be 1-1/2-inches, not 1-inch. This can be noticeable in the wall, and thus the contractor may want to consider transitioning the setback from 1-inch to 1-1/2-inches over a distance of three blocks or 12-feet. This can be done by cutting a small portion off the back of the tongue on the Retaining Wall block. The objective would be to remove 3/8-inch off the first tongue, then 1/4-inch, and finally 1/8-inch. Doing so will allow the wall setback to gradually go from 1-inch to 1-1/2-inches.

The tools needed to make this transition include a chop saw with diamond blade, a string line, a permanent marker, a hammer and a chisel. The drawing illustrates the cuts that can be made to soften the transition. Use the string line and marker to layout the cuts.



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