Landscape Enhancement with AB Fence: Nardei Fence

If you are anything like the Nardeis, your wooden fence is deteriorating, showing its age and needs replacement. These Calgary homeowners wanted to upgrade their fence to a system that has little maintenance and will keep its look. They found the aesthetic they were looking for by using Allan Block's AB Fence System while adding value to their home.

## Plan

The Nardeis wanted something more permanent to replace the old wood fence, but they also wanted to make sure the aesthetic would match their existing landscaping with a pattern effect. As a way to satisfy the homeowners request, Jim Dejewski, the local sales rep, combined two different colors to create a custom color, Kananaskis Grey (3 color blend), which advantageously resulted in some cost savings and satisfied the customer.


The fence was to be placed as close to the property line as possible. However, the design of the $A B$ Fence post blocks extends out from the plane of the fence panel about 3 inches ( 75 mm ) on either side, which would require the fence to be moved away from the property line reducing the walkway to their backyard. In order to minimize the footprint of the fence and maximize space for a walkway, 6 inches ( 150 mm ) wide I-beams were suggested to be used instead of AB Fence Post Blocks. Allowing for the fence to be completely flush on both sides.

## Design

The design of the $A B$ Fence System is a straightforward post and panel configuration where the loading is applied to the panel and is transferred to the post through the use of bond beams. Danny Wolsey from Wolsey Structural Engineering was employed to design the fence with help from the Allan Block Engineering Department, who provided the specs of the blocks. In this case the posts are large I-beams
whose size was chosen to fit around the panel blocks. The posts were designed very similar to a soldier pile wall with the panels made out of our AB Fence. The panels consist of a bond beam at the bottom and top, with dry stacked blocks between. Due to the panel blocks also being 6 inches ( 150 mm ) wide, about 0.25 inches ( 6 mm ) was shaved off each side of the blocks in order to fit into the I-beams.

## Build

The contractor that was chosen for this unique fence application had never installed the AB Fence system before, so they relied on their local rep, Jim Dejewski with Oldcastle APG Canada West/Expocrete, for information as well as the Installation Manuals and videos. The contractor said "it was pretty easy to wrap our heads around the installation" with the resources available.

This unique project did not come without obstacles to overcome during construction. With the design utilizing IBeams instead of the standard AB Fence Post Blocks, they couldn't use the standard installation steps, so they had
 to create a process to ensure the I-beams were perfectly in
 line with each other. Because the site was very limited on space, the installation of the l-beams posed a problem with lifting and placing them. To work within the confines of the space, $\underline{H a r d e r ~ a n d ~ S o n s ~ u s e d ~ a ~ s p y d e r ~ c r a n e ~ t o ~ l i f t ~ a n d ~ s e t ~}$ the l-beams into the timber forms. Another complication with using the I-beams was the fit of the panel blocks into the web of the beam. The webbing of the beams was a "hair too narrow for the fence blocks, forcing the contractor to grind down 0.25 inches ( 6 mm ) on each block that fit in the posts" according to Samuel.

Even with these conditions and design modifications the $160 \mathrm{ft}(80 \mathrm{~m})$ long fence was installed to the client's desire of a matching aesthetic, low maintenance, and permanent solution to replace their deteriorating fence.

