Agru-Lock® Vertical Sealing System

Sealing cut-off walls with bentonite creates certain permeation reduction, but not permeation stop. However, it is possible to achieve permeation stop with the Agru-Lock® system, which also enables percolation at panel joints along a specified path. Agru-Lock® systems are ideal for locations where contaminated groundwater streams need to be stopped or treated with “gate and fence” systems and at construction sites where the groundwater table must be kept at a low level.
Type C- Evolution

When developing the Agru-Lock® system, which is based on the patented Lock Type A, we made two important decisions to evolve the design:

The ability to provide Agru-Lock® C-Evolution products in rolls measuring up to 45 meters, which allows for customization based on customer requirements.

A 130 millimeter welding section of the profile that ensures weldability with any common hot wedge welding machine.

Special Features of the New Type

• Horizontal separation load greater than 15 kN/m run of interlock
• The interlock has outstanding high horizontal elongation properties
• A customizable profile length
• Designed for tough working conditions
• Easy, simple assembly at construction site
• Option to fill the box section with a special sealing compound
• Identical male and female profile
• Made of HDPE
• Option to install with frame or coiling drum
## Installation Procedure

<table>
<thead>
<tr>
<th>Step</th>
<th>Procedure</th>
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<tbody>
<tr>
<td>Step 1</td>
<td>Using a specially equipped excavator, a cut-off wall is dug, and a steel frame along the trench will assist an alignment device.</td>
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<td>Step 2</td>
<td>Next, bentonite slurry is pumped into the trench in order to stabilize the cut-off wall during the excavation process.</td>
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<td>Step 3</td>
<td>A coil trailer transports the fabricated panels to their appropriate installation section.</td>
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<td>Step 4</td>
<td>These panels are then fixed to a frame that will be inserted into the panel of the cut-off wall.</td>
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<td>Step 5</td>
<td>Finally, the panel is lowered into the trench and interlocked to the other panels.</td>
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Installation Equipment

Once all of the panels are placed, a grab-bucket conveyer is used to excavate the trench to the specified depth; the width of the trench will be the same as the width of the grab. During this process, bentonite slurry is pumped into this trench using a pipe or tube directly connected to the grab to provide support.

Downfeed of the panel using a drum with an electric drive unit.

Clamping the HDPE panel with steel bars over the whole panel width.

Raising the installation frame with the Agru-Lock® panel attached.
For more information on Agru-Lock® Vertical Sealing System and other Agru products, please reach out to us.