

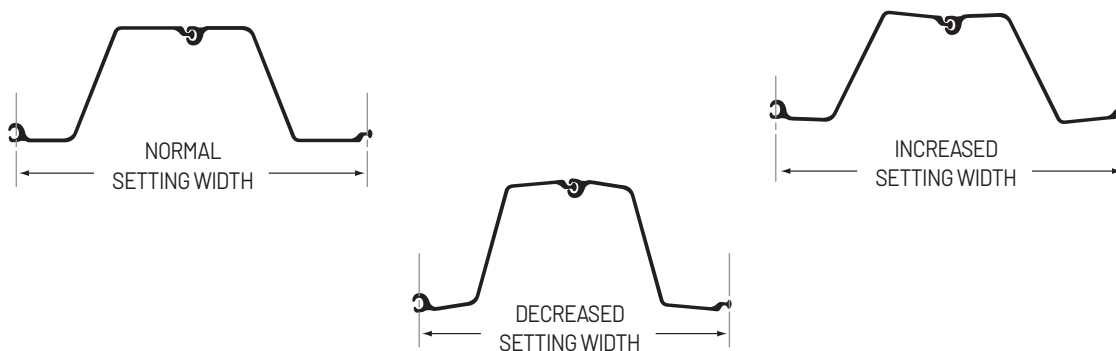
SETTING AND DRIVING TIPS FOR Z-PROFILE SHEET PILING:

Proper setting and driving techniques are beneficial to both the project and the contractor. Improper practices result in problems and costs that far out-weigh the initial expense of applying correct methods from the start. Although setting and driving techniques may vary according to the site conditions and/or the contractor's level of experience, several basic principles can be applied as outlined below.

Use an adequate template: The utilization of an adequate steel template will facilitate the installation process and result in a superior end product. The purpose of the template is to both properly align the sheet pile during the setting process as well as to keep the piling in alignment during the driving phase. Since a typical sheet pile weighs one ton or more, the template needs to be of rugged construction. Also, bear in mind that the template will normally be used and moved multiple times at the job site; this is another reason for a well-designed and solidly constructed template. Template must also be of correct dimensions for the piling section. An improperly dimensioned template could cause sheet binding and increase driving difficulty.

Mark the template: To maintain the published laying width of the piling, it is very important to mark the template for each pile, or pair. By following this procedure, the contractor can observe whether the line being set is gaining or losing wall length. This procedure is important for installations such as: cofferdams, which must be closed; or anchored bulkheads, where tie-rod locations are critical. Depending upon the length of the piling, the template might be one, or two or more tiers high. In order to maintain a plumb wall when installing piling lengths in excess of 50 feet (15 meters), a two-tier template is always suggested as a minimum.

Set a panel of piling: The length of the panel will vary depending upon site conditions, the contractor's experience, and other factors. In general, you might expect a panel length of 25 to 45 feet (8 to 14 meters). As each pile, or pair, is set, they may be rotated as necessary in the interlock (as shown below) in order to match the marks on the template.



Sheet piling supplied with the interlocks crimped or welded does not offer this advantage.

Keep the piling plumb: It's of utmost importance that, as each pile or pair is set, it is plumb and secured before the next is set. Once the wall is allowed to get out of vertical alignment, the mistake will only get worse; and at some point the contractor will simply have to quit, extract the out of plumb piling, and start over. The most important tool of the pile driving crew is a long level: 4 feet (1.25 meter) or more in length, or a vertical laser.