

M I S C E L L A N E O U S D E T A I L S

► QUESTIONS AND ANSWERS

TERRACES	
<p>QUESTION: <i>When building gravity walls with terraces, what is the recommended distance between the terraced walls where the upper wall does not affect the loading condition on the lower wall?</i></p> <p>ANSWER: The distance between terraces (face of wall to face of wall) should be greater than or equal to two times the lower wall height. Typically this can also work for lower height soil reinforced walls. With higher reinforced walls or walls built on a slope, the issue of global stability must be considered by a qualified engineer in analyzing the terrace situation.</p>	
<p>QUESTION: <i>What are the recommended methods to avoid settlement when building a wall that has terraces converging into a single wall?</i></p> <p>ANSWER: If at all possible, build on bench cut virgin soil conditions. If this is difficult to achieve, the next best solution is to build the base course of the terrace as it approaches the single wall, to a deeper elevation (either stepping down to the same level as the single wall or to virgin soil at a higher elevation). This provides for a deeper and more stable base condition.</p>	
<p>QUESTION: <i>How far apart do the terrace walls have to be to perform as individual gravity walls?</i></p> <p>ANSWER: As a rule of thumb, the minimum distance between the wall terraces must be at least equal to twice the height of the lower wall.</p> <p>EXAMPLE: If the lower gravity wall is 5 feet (1.5m) tall, then the minimum recommended spacing between terraces is 10 feet (3m). This rule also applies to walls with more than two terraces. The distance between any two terraces must be at least equal to twice the height of the lower adjacent terrace wall.</p> <p>Note: This simple rule of thumb does not address global stability where walls are built on steep slopes or over poor soils of low friction strength. If these conditions exist, then contact your local Keystone representative or a local engineer.</p>	
<p>QUESTION: <i>What if there isn't enough room to space the terraces according to this rule? (2 x H1 MIN.)</i></p> <p>ANSWER: The wall can still be built, but the effect of the upper terrace on the lower terrace and overall stability must be taken into account when designing the wall(s). When the terraces are close together, the design analysis may model the structure as a single taller wall to account for the added load from the upper terrace wall on the lower wall(s).</p>	