

Indirect Vertical Measurements (Pile Height)

for ExamNet:

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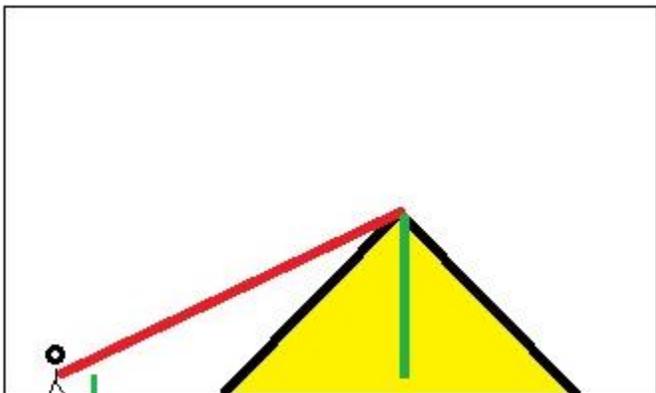
We will explain how to use a Leica Disto D8's "Indirect measurement with tilt sensor". For simplicity, we will call this the "percent button" (shown in the red circle in picture at right). Using the Percent button it is possible to easily measure a vertical height of a ground pile or the sidewall height in a flat building without actually climbing on the grain. 1. Turn the unit on by the pressing the big red button once



2. Press the Percent button twice in quick succession to measure "Direct Horizontal Distance". After doing this the graphic will appear as shown in the photo at left with the single red line angling up. You are now ready to take an angled measurement and Disto will calculate the equivalent horizontal measurement to the center of the pile (i.e. pile radius) but Disto will ALSO calculate the indirect VERTICAL height which is what we are

interested in.

Indirect Pile Height:



Aim the laser (a tripod is very helpful here) at the top of the pile as shown in the illustration at left. Get as high as possible on the pile while still remaining on the pile. The viewfinder button is very useful for this reading (extreme upper left corner of Disto D8). Press the red button once to take the measurement. Now press and hold the Percent button until the display changes to the display as shown in the photo at left. These are additional calculations based on the same measurement. The one we are interested in is indicated by the red box in the photo. This is the indirect vertical calculation which is shown as the vertical green line on the illustration above. Remember that you will need to ADD the height the laser is above the ground to indicated by the two green segments on the



illustration.