

# PERCENTAGE CONVERSION CHART

10-47%	48-85%	86-215%	220-405%	410-1000%
1 in 10 = 10.000%	1 in 48 = 2.083%	1 in 86 = 1.163%	1 in 220 = 0.455%	1 in 410 = 0.244%
1 in 11 = 9.091%	1 in 49 = 2.041%	1 in 87 = 1.149%	1 in 225 = 0.444%	1 in 415 = 0.241%
1 in 12 = 8.333%	1 in 50 = 2.000%	1 in 88 = 1.136%	1 in 230 = 0.435%	1 in 420 = 0.238%
1 in 13 = 7.692%	1 in 51 = 1.961%	1 in 89 = 1.123%	1 in 235 = 0.426%	1 in 425 = 0.235%
1 in 14 = 7.143%	1 in 52 = 1.923%	1 in 90 = 1.111%	1 in 240 = 0.417%	1 in 430 = 0.233%
1 in 15 = 6.667%	1 in 53 = 1.887%	1 in 91 = 1.099%	1 in 245 = 0.408%	1 in 435 = 0.230%
1 in 16 = 6.250%	1 in 54 = 1.852%	1 in 92 = 1.087%	1 in 250 = 0.400%	1 in 440 = 0.227%
1 in 17 = 5.882%	1 in 55 = 1.818%	1 in 93 = 1.075%	1 in 255 = 0.392%	1 in 445 = 0.225%
1 in 18 = 5.556%	1 in 56 = 1.786%	1 in 94 = 1.064%	1 in 260 = 0.385%	1 in 450 = 0.222%
1 in 19 = 5.263%	1 in 57 = 1.754%	1 in 95 = 1.053%	1 in 265 = 0.377%	1 in 455 = 0.220%
1 in 20 = 5.000%	1 in 58 = 1.724%	1 in 96 = 1.042%	1 in 270 = 0.370%	1 in 460 = 0.217%
1 in 21 = 4.762%	1 in 59 = 1.695%	1 in 97 = 1.031%	1 in 275 = 0.364%	1 in 465 = 0.215%
1 in 22 = 4.545%	1 in 60 = 1.667%	1 in 98 = 1.020%	1 in 280 = 0.357%	1 in 470 = 0.213%
1 in 23 = 4.348%	1 in 61 = 1.639%	1 in 99 = 1.010%	1 in 285 = 0.351%	1 in 475 = 0.211%
1 in 24 = 4.167%	1 in 62 = 1.613%	1 in 100 = 1.000%	1 in 290 = 0.345%	1 in 480 = 0.208%
1 in 25 = 4.000%	1 in 63 = 1.587%	1 in 105 = 0.952%	1 in 295 = 0.339%	1 in 485 = 0.206%
1 in 26 = 3.846%	1 in 64 = 1.563%	1 in 110 = 0.909%	1 in 300 = 0.333%	1 in 490 = 0.204%
1 in 27 = 3.704%	1 in 65 = 1.538%	1 in 115 = 0.870%	1 in 305 = 0.328%	1 in 495 = 0.202%
1 in 28 = 3.571%	1 in 66 = 1.515%	1 in 120 = 0.833%	1 in 310 = 0.323%	1 in 500 = 0.200%
1 in 29 = 3.448%	1 in 67 = 1.493%	1 in 125 = 0.800%	1 in 315 = 0.317%	1 in 525 = 0.190%
1 in 30 = 3.333%	1 in 68 = 1.471%	1 in 130 = 0.769%	1 in 320 = 0.313%	1 in 550 = 0.182%
1 in 31 = 3.226%	1 in 69 = 1.449%	1 in 135 = 0.741%	1 in 325 = 0.308%	1 in 575 = 0.174%
1 in 32 = 3.125%	1 in 70 = 1.429%	1 in 140 = 0.714%	1 in 330 = 0.303%	1 in 600 = 0.167%
1 in 33 = 3.030%	1 in 71 = 1.408%	1 in 145 = 0.690%	1 in 335 = 0.299%	1 in 625 = 0.160%
1 in 34 = 2.941%	1 in 72 = 1.389%	1 in 150 = 0.667%	1 in 340 = 0.294%	1 in 650 = 0.154%
1 in 35 = 2.857%	1 in 73 = 1.370%	1 in 155 = 0.645%	1 in 345 = 0.290%	1 in 675 = 0.148%
1 in 36 = 2.778%	1 in 74 = 1.351%	1 in 160 = 0.625%	1 in 350 = 0.286%	1 in 700 = 0.143%
1 in 37 = 2.703%	1 in 75 = 1.333%	1 in 165 = 0.606%	1 in 355 = 0.282%	1 in 725 = 0.138%
1 in 38 = 2.632%	1 in 76 = 1.316%	1 in 170 = 0.588%	1 in 360 = 0.278%	1 in 750 = 0.133%
1 in 39 = 2.564%	1 in 77 = 1.299%	1 in 175 = 0.571%	1 in 365 = 0.274%	1 in 775 = 0.129%
1 in 40 = 2.500%	1 in 78 = 1.282%	1 in 180 = 0.556%	1 in 370 = 0.270%	1 in 800 = 0.125%
1 in 41 = 2.439%	1 in 79 = 1.266%	1 in 185 = 0.541%	1 in 375 = 0.267%	1 in 825 = 0.121%
1 in 42 = 2.381%	1 in 80 = 1.250%	1 in 190 = 0.526%	1 in 380 = 0.263%	1 in 850 = 0.118%
1 in 43 = 2.326%	1 in 81 = 1.235%	1 in 195 = 0.513%	1 in 385 = 0.260%	1 in 875 = 0.114%
1 in 44 = 2.273%	1 in 82 = 1.220%	1 in 200 = 0.500%	1 in 390 = 0.256%	1 in 900 = 0.111%
1 in 45 = 2.222%	1 in 83 = 1.205%	1 in 205 = 0.488%	1 in 395 = 0.253%	1 in 925 = 0.108%
1 in 46 = 2.174%	1 in 84 = 1.190%	1 in 210 = 0.476%	1 in 400 = 0.250%	1 in 950 = 0.105%
1 in 47 = 2.128%	1 in 85 = 1.176%	1 in 215 = 0.465%	1 in 405 = 0.247%	1 in 975 = 0.103%
				1 in 1000 = 0.100%

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# HOW TO GRADE WITH YOUR LASER LEVEL

PLEASE REFER TO THE INSTRUCTION MANUAL SUPPLIED WITH YOUR LASER LEVEL FOR GRADE COMPATIBILITY

## AUTOMATIC (DIAL-IN) GRADE

### STEP 1

Set up your laser level with the desired axis that you want to use facing the same direction that you will be operating. Turn on your laser level and allow it to level off and begin rotating in normal horizontal mode. When your laser level has started to rotate, locate the laser beam with your laser detector attached to a staff.

### STEP 2

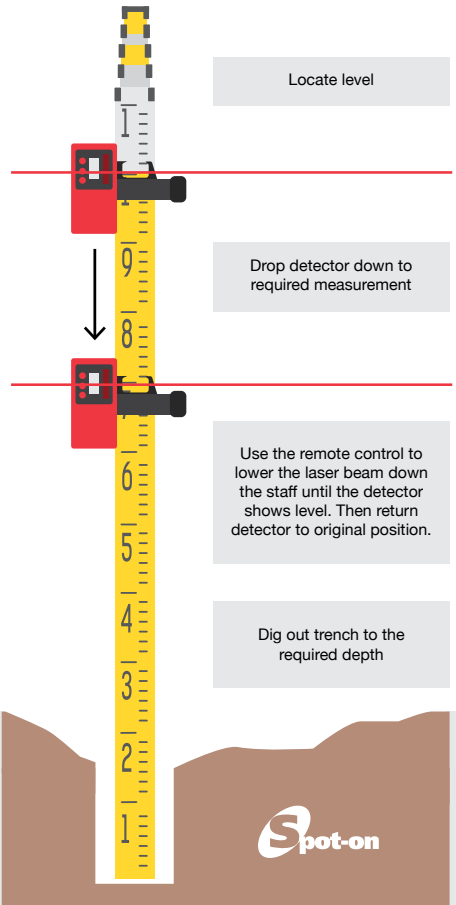
Once you have located the level position on the staff, enter in the required grade percentage using the laser level's controls. Please refer to your laser level's instruction manual for further information on creating a grade using the dial-in method.

### STEP 3

Once the selected grade has been entered into the laser level and accepted that it is correct, the grading process will commence. Depending on the brand and model of laser level that you are using, the laser level may display a visible indicator on a digital screen or an audible tone to confirm that the grading process is complete. Please refer to your laser level's instruction manual for further information on these features and operations.

### STEP 4

Dig out soil and lower the staff until the detector locates the laser beam. Repeat this step as you move away from the laser level keeping in-line with the grade that you have set.



## MANUAL GRADE

### STEP 1

Set up your laser level with the desired axis that you want to use facing the same direction that you will be operating. Turn on your laser level and allow it to level off and begin rotating in normal horizontal mode. When your laser level has started to rotate, locate the laser beam with your laser detector attached to a staff.

### STEP 2

Using the laser level's control panel or remote control (if supplied), press the manual/grade mode button to deactivate the automatic levelling sensors and place the laser level into manual/grade mode. Please refer to your laser level's instruction manual for further information on the manual/grade mode feature and its operation.

### STEP 3

To calculate the exact measurement from this grade chart you will need to take two measurements based off the fall. For example, if you required a 1 in 60 fall that equaled 1.667% you would need to measure out 6 meters from the laser and lower the laser detector down the staff 100 millimeters from the original horizontal level position. Please note that the accuracy of the grade that you want to use is based off the accuracy of these two measurements.

### STEP 4

Once the laser level has been placed into manual/grade mode, press the relevant adjustment buttons on the laser level's control panel or on the remote control (if supplied) to tilt the laser beam down the staff to the required measurement. Please refer to your laser level's instruction manual for further information on the manual/grade mode feature and its operation.

### STEP 5

Return the detector to the original level position on the staff.

### STEP 6

Dig out soil and lower the staff until the detector locates the laser beam. Repeat this step as you move away from the laser level keeping in-line with the grade that you have set.