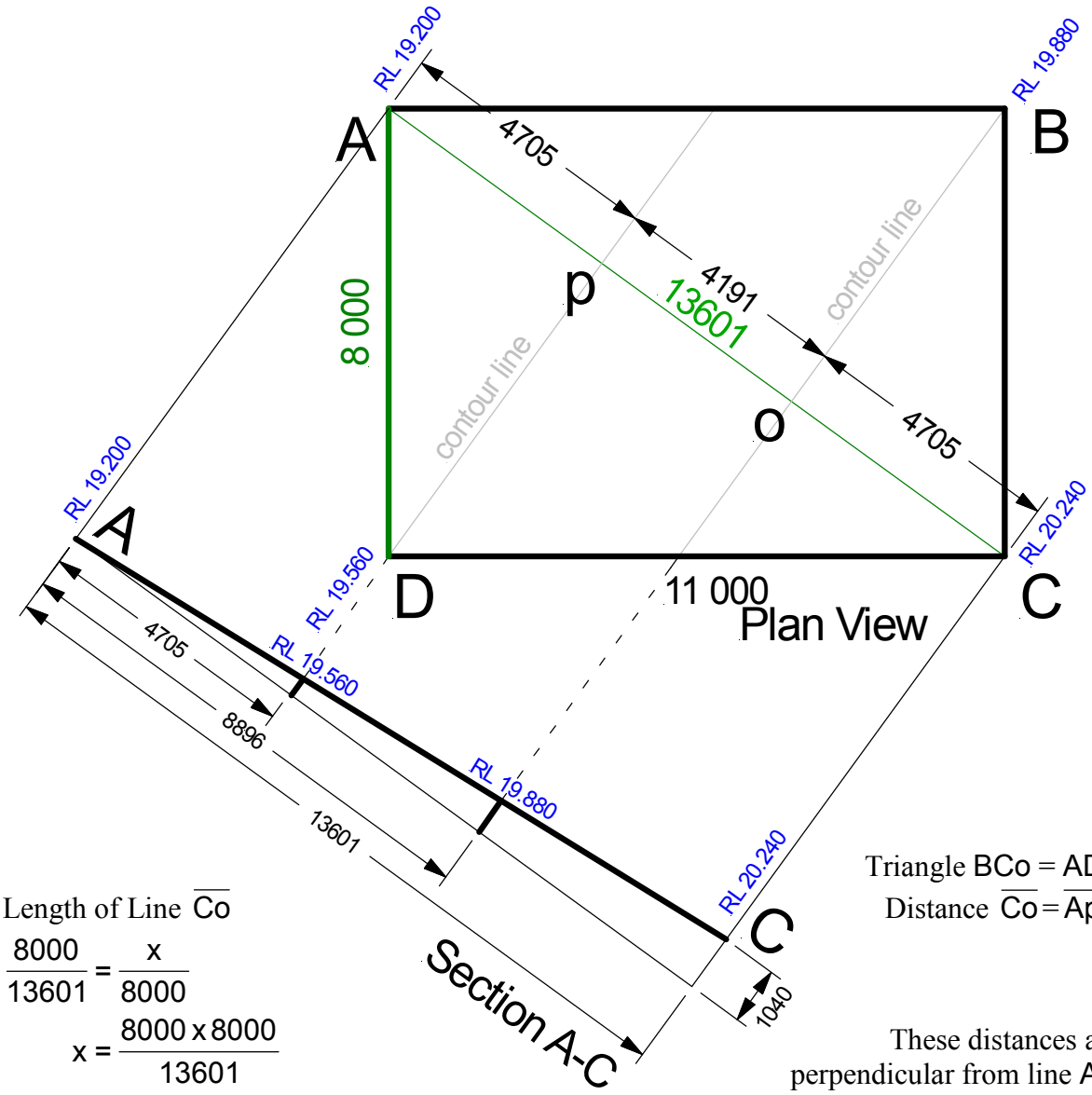
What fall has a patio from point C to point A?

Use Pythagoras to find the length of the diagonal

$$d = \sqrt{8000^2 + 11000^2}$$
$$= 13601$$

Now we use similar triangles to find the required information.



Length of Line $\overline{Co}$

$$\frac{8000}{13601} = \frac{x}{8000}$$
$$x = \frac{8000 \times 8000}{13601}$$
$$= 4705$$

Triangle BCo = ADp
Distance $\overline{Co} = \overline{Ap}$

These distances are perpendicular from line AC to corner D and B respectively,
Therefore distance from point A to p = 4705, from A to o = 8896

The rise from A to C is a straight line from point A (RL = 19.200) to point B (RL= 20.240)
The difference between point A and Point B is 20.240 – 19.200 = 1040

$$\frac{1040}{13601} = \frac{x}{4705}$$
$$x = \frac{1040 \times 4705}{13601}$$
$$= \underline{\underline{360}}$$

and

$$\frac{1040}{13601} = \frac{x}{8896}$$
$$x = \frac{1040 \times 8896}{13601}$$
$$= \underline{\underline{680}}$$

RL at D 19.200 + 0.360 = **19.560** and RL at B 19.200 + 0.680 = **19.880**