



Radius of Curvature (R) & Tangent Length (M) min Values

Question:

Are differences in values of R & M important?

Answer:

In general, the R and M are figures recommended by the PT systems in order to:

- ensure maximum anchorage efficiency,
- maximum fatigue life and prevention of strand breakage, i.e., the strands enter the anchorage without excessive kinking,
- prevent excessive friction loss and damage to the prestressing sheathings,
- achieve a proper installation and stressing and minimize the flexural stresses.

The bigger the R and M the smoother the geometry, thus easier installation, and implementation of PT in a structural item.

Differences of $M < 0.2m$ are negligible from structural point of view. Also, R & M are not used as solid and fixed pair of values, meaning that R and M must have specific values. Differences to the order of $\pm 10\%$ are acceptable considering also the size of the duct.

It is always recommended to seek the designer's opinion. At the end of the day a minor change in the geometry approved by the designer may help to overcome any issue.

