

How safety factor drops if the roots are cut?



A brief case study by Tibor Horvath with Fakopp Pulling Test

The tree stood in a suburb garden.

The conditions indicated that it should be removed.

The removal was turned into a series of 6 experiments on how the tree loses its' stability as „losing” the main roots.

Safety factors for 33 m/s (cc. 120 km/h) were calculated.



Cases and safety factors 1



Intact
1.19



Excavated
0.86



First cut (one cut)
0.61

Cases and safety factors 2 – After cutting...



...4 roots

0.33



...7 roots

0.27



...all the roots (11)

0.14

Results

