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Abstract

This paper presents the results of 162 individual drop tests performed at PMI and slow-pull elongation data for five different life safety ropes. It was confirmed from this line of testing that the static and low stretch ropes exhibit a trend of increasing impact forces generated as the length of drop and rope are increased for any given fall factor. While this trend may be considered minimal at FF 0.25, the trend of increasing forces for FF 0.5 and greater was in fact significant.

While this report may prove useful as educational and reference material for professional rope users, it is NOT intended to be a "user's guide" at this point in time. Rather, the purpose of this report is primarily to report these initial findings of the larger effort to more accurately model the performance and limitations of life safety ropes.