

Abstract for:

Laboratory and Field Evaluation of the Normal Coefficient of Restitution for Rocks

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L.R. Richards^(a); B. Peng^(b); D.H. Bell^(c)

(a) Rock Engineering Consultant, Canterbury, New Zealand

(b) & (c) Department of Geological Sciences, University of Canterbury, New Zealand

Summary:

The paper describes laboratory and field tests on the normal coefficient of restitution as a parameter in rockfall trajectory analyses. A simple prediction method has been developed which enables the normal coefficient of restitution to be predicted from the Schmidt hammer rebound values of the projectile and the impact surface. The results indicate that realistic values for this parameter may be much lower than those suggested by various publications and computer user manuals. Use of a velocity scaling factor for R_n is shown to provide a more logical explanation for the apparent relationship between normal coefficient of restitution and the impact angle. Determination of the appropriate velocity factor is as important as assessment of the restitution coefficient.