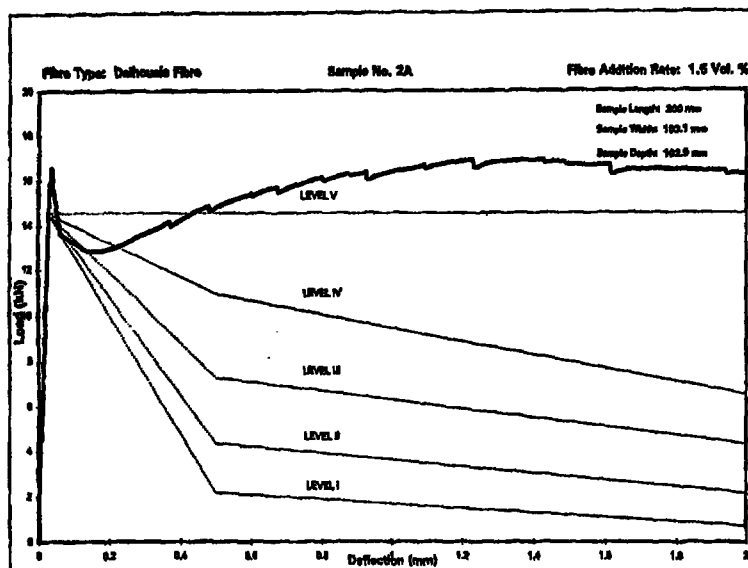




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(54) Title: FIBER REINFORCED BUILDING MATERIALS



Flexural Toughness Curve- Shotcrete 1.5% Vol.

(57) Abstract

In accordance with the present invention, there are provided novel fiber reinforced building material formulations, comprised of an inorganic binding agent and synthetic fibers. The fibrous material employed in invention formulations is capable of undergoing progressive fibrillation upon agitation. As a result, tougher building materials, due to higher fiber addition rates than previously possible, are produced. Formulations containing Portland cement-based compositions and fibrillating synthetic fibers are also contemplated. In addition, there are provided methods of producing fiber reinforced building materials, including Portland cement-based compositions, and articles produced therefrom.