

## NATURE AND BEHAVIOUR OF CEMENT WOOD FIBREBOARDS

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### **Abstract**

The paper will present some of research outcomes from a comprehensive research programme on 'Cement wood fibreboards' at the Building Research Establishment and Civil Engineering Department of Brunel University, UK. The paper will specifically record work carried out to analyse the structure and determine the behaviour of cement fibreboards (CFB). The structure has been quantified with respect to the structural parameters of and interaction between individual components (pore, wood fibres and cement paste), and the movement has been analysed with respect to the structure of CFB and the nature of the cement paste and wood fibres. Many significant outcomes have been achieved, which include:

- 1) The volume distributions of constituents (raw materials) and CFB;
  - 2) Orientation, size and shape distribution of constituents and CFB;
  - 3) Moisture and water-CFB bonding sites;
  - 4) Moisture states in CFB and behaviour of CFB;
  - 5) Computation of physical properties of CFB.
- And this paper summarises the most recent findings on these aspects.