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(54) **FIRE-RETARDANT CEMENTITIOUS SHEAR BOARD HAVING METAL BACKING WITH TAB FOR USE AS UNDERLAYMENT PANEL FOR FLOOR OR ROOF**

(75) Inventor: **A. Carleton Elliott**, Newport Beach, CA (US)

(73) Assignee: **Specialty Hardware L.P.**, Newport Beach, CA (US)

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See application file for complete search history.

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Primary Examiner—Richard E Chilcot, Jr.
Assistant Examiner—Chi Nguyen
(74) *Attorney, Agent, or Firm*—Jerry Turner Sewell

(57) **ABSTRACT**

A shear panel for constructing underlayments for floors and roofs of buildings includes a first rectangular layer of fire-resistant material, such as cementitious board, bonded to a second rectangular layer of thin high-strength material, such as galvanized steel. The length of the second layer is longer than the length of the first layer. The additional length of the second layer forms a tab extending from one end of the panel. During construction, a first panel is attached to a set of beams (floor joists or roof rafters) with the tab spanning between adjacent beams. A second panel is positioned on the beams with at least a portion of the second panel overlapping the tab of the first panel. The overlapping portion of the second panel is fastened to the tab of the first panel to form a continuous shear diaphragm for the floor or roof.

5 Claims, 8 Drawing Sheets