

INCREASED FRAMING LOADING AS A FUNCTION OF CLADDING MATERIALS AND THEIR ARRANGEMENTS

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Work at the Waterways Experimental Station in the early 1990s showed that material loosely abutting the sides of a column significantly slowed down the relief of the reflected pressure on the column and hence increased damage. This paper reports HE shots which investigated the damage on a steel column when clad with materials of different strengths, some abutting and others overlapping the front of and touching but not fixed to, the column. The blast came from 17.5 kg of COMP-B detonated on the ground at 1.75 m from the column. Some shots were against a bare column, and others with glass or concrete cladding, as shown in Figure 1.