

SIMULATED BLAST TESTS ON CONCRETE BARRIERS

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A series of thirteen concrete barriers of a model scale of about 1 to 4 were tested in a blast simulator. Most of the barriers were loaded until complete failure. The purpose of the test was to find out if any additional effects would occur due to the dynamic nature of the load in comparison with earlier performed static tests. In general the behavior of the barriers under blast load was found to be similar to what was expected from the static tests.

Some calculations made, mainly using the finite element method, confirmed the idea that a barrier even with fairly big holes carries the load as an arch or a dome.