PENETRATION OF AIR-BLAST INTO ENTRANCE BUILDINGS

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Air blast parameters are needed to dimension doors and valves in entrance buildings of "blast-hardened military shelters. Data are available. for nuclear weapons effects if the munition explode at some distance outside the entrance.

Different problems result if conventional munitions detonate very close to the entrance. In that case not only the peak overpressure but likewise the pressure-time history is significant for the structural response.

Results of pressure measurements at model test series will be reported at which elongated charges are detonated with their center one tunnel diameter outside a shelter entrance. The charge axes are brought into line and perpendicular to the tunnels axis. Corresponding to the unsymmetrical pressure field close to a detonation elongated charge, substantial different blast parameters are measured inside the entrance building for the two charge arrangements. The results will be presented in the form of scaled parameters.