

RETROFITTING MASONRY WALLS TO RESIST BLAST LOADS

S. P. Ward

*Baker Risk Europe Ltd Chester Business Park, Chester, CH4 9QR
United Kingdom, Tel: +44 (0)1244 893178, Fax: +44 (0) 1244 893101*

ABSTRACT

Considerable advances have been made in recent years in making buildings more blast resistant both to deliberate and accidental explosions. For many years the emphasis was placed on understanding how the glazing in a building performed under blast loads but now that glass performance has been well documented, more attention is now being paid to the walls. Various retrofit options for reinforcing existing masonry walls have been developed in recent years and this paper identifies some of the more successful techniques. Theoretical analysis supported by results from live tests is presented with emphasis being placed on novel and low-cost retrofit options.