

# **MITIGATION OF BLAST IN URBAN ENVIRONMENTS URBAN STREET SPATIAL ORGANIZATION TO REDUCE BLAST EFFECTS IN URBAN ENVIRONMENTS**

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"Protection against Terrorism" is an emerging factor which influences the urban planning process offering a new dimension to town planning.

Although, the risk to any individual structure of becoming the object of a terrorist attack is very small, analysis of terrorist attacks in the last decade indicates that this risk is greatest for facilities in city centres and public spaces. In this case the entire urban environment experiences the effects of the blast wave, which can cover miles of the surrounding areas.

The Urban Planner may make a contribution to the mitigation of blast effects by optimizing town planning facets (streets, squares, land use, street architecture... etc.). These facets can play a significant role in blast wave management by the confinement, shielding, venting and dissipation through the spaces providing a measure of protection without compromising appearance and utility.

This paper presents the findings from a programme of research which explores the role of street geometry on protection and the influence of spatial organisations in urban environments.