

## PRELIMINARY EVALUATION OF CLEARING EFFECTS IN THE NEAR FIELD

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For finite-sized targets subjected to a blast wave from an explosive event, the presence of an edge results in the generation of a clearing wave that moves inwards from the edge of the panel and acts to relieve the pressure on the target. Whilst previous investigations have focused on the role of clearing for far-field blast loading scenarios, minimal work has been documented within the near-field.

This numerical investigation focuses on quantifying the role of clearing on the impulse delivered to different sized targets within the near-field. The spatial distribution of loading is quantified using the flying ring technique, with the charge size and stand-off distance adjusted to evaluate the influence of clearing at a range of scaled distances. Additional simulations are used to isolate the role of the air shock from the detonation products for the loading scenarios considered in the investigation. The results of this preliminary study indicate that while clearing has a more pronounced effect for larger stand-off distances, it still acts to reduce the imparted impulse in the near-field.