# HOW CAN ARMORCOAT<sup>®</sup> BETTER PROTECT YOUR BUILDING AND THE PEOPLE IN IT?

The high pressure of the air-blast that enters through broken windows can cause eardrum damage and lung collapse. As the air-blast damages the building components in its path, missiles are generated that cause impact injuries. Airborne glass fragments typically cause penetration or laceration-type injuries. Larger fragments may cause non-penetrating, or blunt trauma, injuries.

Source: Explosive Blast Document (FEMA 428), FEMA (Federal Emergency Management Agency)

### THE DIAGRAM BELOW ILLUSTRATES THE EFFECTS OF TWO BOMB SIZES

A car carrying approximately 500 lbs. of TNT can create glass projectiles at distances greater than 600 feet. Glass protected with Armorcoat safety film<sup>1</sup> can limit the risk of flying glass debris as close as 150 feet of the source of the explosion. A van carrying approximately 1,000 lbs. of TNT can create glass projectiles at distances greater than 800 feet. Glass protected with Armorcoat safety film<sup>1</sup> can limit the risk of flying glass debris as close as 330 feet of the source of the explosion.



#### Unprote



## Unprotected Building

Protected with Solar Gard<sup>®</sup> Armorcoat<sup>®</sup> Safety Film

 $^{\rm l}$  Armorcoat 14 mil (350 micron) safety film on  ${\it 14^{\prime\prime}}$  (6 mm) glass, with 4-sided anchoring system

Source: Blast analysis was completed by Saint-Gobain Solar Gard, utilizing the Wingard PE blast modelling program. Wingard Glazing Analysis Response and Design is a computer blast response prediction model created by Applied Research Associates, Inc. for the General Services Administration (GSA). Applied Research Associates, Inc. is an engineering sciences company well known and respected in the field of material responses to blasts.



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