CPTED and COUNTER TERRORISM

fear of crime

detection and apprehension
detection and apprehension

glass as a weapon

terrorist target?
separating people from vehicles

effective barriers?

temporary barriers

"IMPACT ANGLE" is measured between the direction of head of the vehicle and the impact location (between 0°-90°)
separating people from vehicles

building stand off

water features
VSB foundations around underground car parks
CPNI 2010

STANDARDS:
BSI PAS 68 relates to the device itself and the duration of kinetic energy it can absorb 'impact capacity'.
BSI PAS 69 relates to guidance for the selection, installation and use of vehicle security barriers.

LAYERS OF SECURITY

EXTERNAL
Exposed columns
Facades (masonry and glass)

INTERNAL
Building core (underground car park)

EVERY METER COUNTS
EXPLOSION
Parked truck takes out a single main column.

COLLAPSE
The structure was not able to redistribute the force carried by that column to the neighbouring main columns.

“Progressive collapse results from the failure of one structural component and leads to the failure of one or more further structural components” (Starossek 2009)

OKLAHOMA CITY BOMBING OF 1995, the Alfred P Murrah Federal Building collapsed after a truck bomb attack.

safe places
vehicle management
thank you