

Ceramic Composite Vehicle Armor



Ceramic Composite Vehicle Armor

Monolithic Ceramic Vehicle Armor



Prototype level 2 and 3 doors

- TACOM funded Phase II SBIR with M-Cubed Technologies
- Develop high performance, low cost, ceramic-based tactical vehicle armor with HMMWV as target vehicle
- Concept is to use large monolithic ceramic tiles resulting in reduced ceramic fabrication cost, reduced door assembly cost, and large tiles functioning both as armor and structure
- Two threat levels of armor developed
 - Level 2 – 7.62 mm LPS & 0.50 cal FSP at <10 psf (9.8 psm)
 - Level 3 – 7.62 mm APM2 & 20 mm FSP at <15 psf (5 psm)
- Meet STANAG 4569 level of multi-hit



Level 3 target after two sets of four 7.62 mm APM2 impacts to STANAG 4569 spacing

M1152 Troop Enclosure Armor Development



- Developed a lightweight ceramic composite armor to meet existing M1152 threat and offer large fragmentation protection
- Primary requirement: 7.62 mm AP NATO at 100 m and 2.8 in hit spacing



Test panel shot 45 times – no complete penetrations (front and rear views)

FOR MORE INFORMATION CONTACT:

Manufacturer:
BAE Systems

BAE Systems
Security & Survivability
9113 Le Saint Drive
Fairfield, OH 45014 USA

Telephone 513-881-9800
Toll Free 800-697-0307
Fax 513-881-4850
Email ss.support@baesystems.com
www.baesystems.com/ss

This document gives only a general description of the product(s) or services and except where expressly provided otherwise shall not form part of any contract. From time to time, changes may be made in the products or the conditions of supply. BAE Systems reserves the right to change product specifications without prior notice.

© 2009 BAE Systems
All rights reserved.

07.09.CCVA