

**HWH Protective Structures BRM Test Performance** (HE: High Explosives)  
(ATFP: Antiterrorism/Force Protection) (VCE: Vapor Cloud Explosions)

<b>Type</b>	<b>Peak Reflected Pressure (psi)</b>	<b>Impulse (psi-msec)</b>	<b>Duration (msec)</b>	<b>Response Criteria</b>	<b>Residual Surface Deflection (in)</b>	<b>Construction Materials</b>
<b>HE or ATFP</b>	63	346	18	Low*	0.20	Composite
<b>VCE</b>	35	1,179	200	Low*	0.29	Composite
<b>Competition</b>	8 to 10	Unknown	200	Medium**	Unknown	Steel

\*ASCE defines low damage response criteria as localized building/component damage. Building can be used; however repairs are required to restore integrity of structural envelope (there is no lower level).

\*\*ASCE defines medium damage response criteria as widespread building/component damage. Building cannot be used until repaired. Total cost of repairs is significant.