

TABLE 4.15.2-2.—Aircraft Building Damage Matrix for Zone 4 and Zone 12, Pantex Plant

BUILDING	AIRCRAFT CLASS								
	COMMERCIAL		MILITARY		GENERAL				
	AIR CARRIER	AIR TAXI	SMALL	LARGE	SINGLE ENGINE	MULTIPLE ENGINE	TURBO-PROP	TURBO-JET	HELICOPTERS
Modified Richmond Magazines	D ¹	ND	D ¹	D ¹	ND	ND	ND	ND	ND
Steel Arch Construction Magazines	D ¹	ND	D ¹	D ¹	ND	ND	ND	ND	ND
12-26 Pit Vault	D ²	D ²	D ²	D ²	D ³	D ²	D ³	D ²	D ³
12-41	D ²	D ²	D ²	D ²	D ²	D ²	D ²	D ²	D ²
12-44	ND	ND	ND	ND	ND	ND	ND	ND	ND
12-44 Cell 8	ND	ND	ND	ND	ND	ND	ND	ND	ND
12-50	D ¹	ND	D ¹	D ¹	ND	ND	ND	ND	ND
12-58	D ¹	ND	D ¹	D ¹	ND	ND	ND	ND	ND
12-60	D ¹	D ¹	D ¹	D ¹	ND	ND	ND	ND	ND
12-64	D ²	D ¹	D ¹	D ¹	ND	ND	ND	ND	ND
12-84 East	D ¹	ND	D ¹	ND	ND	ND	ND	ND	ND
12-84 West	D ¹	ND	D ¹	ND	ND	ND	ND	ND	ND
12-85	ND	ND	ND	ND	ND	ND	ND	ND	ND
12-94	D ²	ND	D ²	ND	ND	ND	ND	ND	ND
12-96	ND	ND	ND	ND	ND	ND	ND	ND	ND
12-98	ND	ND	ND	ND	ND	ND	ND	ND	ND
12-99	D ¹	ND	D ¹	ND	ND	ND	ND	ND	ND
12-104	D ¹	ND	D ¹	ND	ND	ND	ND	ND	ND
12-104A	D ²	ND	ND	ND	ND	ND	ND	ND	ND
12-116	D ²	D ²	D ²	D ²	ND	ND	ND	ND	ND
South Vault, North Vault	D ²	D ²	D ²	D ²	D ²	D ²	D ²	D ²	D ²

D = Damage

ND = No Damage

¹Scabbing or perforation occurs for the roof, but not the walls.

²Scabbing or perforation occurs for the roof and the walls.

³Scabbing occurs for the walls, but not the roof.

Source: DOE 1995h:14

Material Release

An aircraft impact into a Zone 12 building that causes significant damage may not necessarily lead to a release of radioactive material. Release of radioactive material is *not*

reasonably foreseeable for nuclear explosive bays, cells, and special purpose facilities (frequency of occurrence is less than 10⁻⁶ per year). In addition, the radioactive materials inventory is much less than what would be found in Zone 4 West magazines.