

SUPPORT
YOUR CIVIL
DEFENSE



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ATTENUATION FACTOR OF DIFFERENT TYPES OF BUILDINGS

If a material has a protection factor of 100, this means that the dose rate of radiation passing through it will be reduced 100 times. Thus if the dose rate were 1500 r/hr, the barrier with a protection factor of 100, would reduce the dose rate to 15 r/hr.

Shelter Category	Protection Factor ¹	Shelter Examples ²
A	1,000 or greater	OCDM underground shelters. Sub-basements or multistory buildings. Underground installations (mines, tunnels, etc.)
B	250 to 1,000	OCDM basement fallout shelters (heavy masonry residences). Basements (without exposed walls) of multistory bldgs.
C	50 to 250	OCDM basement fallout shelters (frame and brick veneer residences.) Central areas of basements (with partially exposed walls) of multistory bldgs. Central areas of upper floors (excluding top floor) of large multistory bldgs. with heavy exterior walls and floors.
D	10 to 50	Basements (without exposed walls) of small 1- or 2-story buildings. Central areas of upper floors (excluding top floor) of large multistory buildings with light exterior walls and floors.
E	2 to 10	Basements (partially exposed) of small 1- or 2-story buildings. Central areas on ground floors in 1- or 2-story bldgs. with heavy masonry walls.
F	1 $\frac{1}{2}$ to 2	Aboveground areas of low buildings, in general, including residences, stores, light industrial buildings.

¹This term expresses the relative reduction in the amount of radiation that would be received by a person in a protected location, compared to the amount he would receive if he were unprotected.

²These examples refer to isolated structures only. The presence of other structures nearby could affect the protection factor of a given shelter area, perhaps enough to change its category.