

Type of Auditorium	$V$ cubic feet	$S$ square feet	Mean Free Path, feet	$\frac{4V}{S}$	$k$	Comments on Distribution of Reflections
(a) Rectangular, 70 ft. by 96 ft. by 48 ft., no balcony.....	322,600	29,400	44.0	43.7	0.049	Probability of reflections from ceiling and floor about 10 per cent greater than from walls
(b) Same as (a) but with balcony, re- garding balcony opening as a reflect- ing surface .....	223,000	24,600	36.2	36.4	.049	
(c) Same as (b) but re- garding space un- der balcony as part of a single cavity...	284,000	32,600	35.6	34.8	.050	
(d) Same as (c) but with gabled ceiling	338,000	34,800	39.8	38.8	.050	
(e) Cube, 70 ft. by 70 ft. by 70 ft.....	343,000	29,400	48.4	46.6	.051	
(f) Office room 48 ft. by 39 ft., 4 in. by 11 ft., 8 in.....	17,600	4,860	13.6	14.5	.046	Most reflections from ceiling and floor
(g) Country church 96 ft. by 32 ft. on plan, 50 ft. to top of gabled ceiling.....	127,000	16,600	30.8	30.6	.049	
(h) Fan-shaped theatre, with balcony.....	470,000	46,300	40.6	40.6	.049	
(i) Cruciform church (no aisles or trusses)	354,000	36,400	42.0	38.9	.053	
(j) Pantheon type, with domed ceiling	690,000	41,500	69.6	66.5	.051	
(k) Barreled ceiling, 99 ft. by 48 ft., on plan.....	172,000	19,300	34.7	35.6	.048	