

Figure: 26 TAC §511.169(a)

SOUND TRANSMISSION LIMITATIONS IN LIMITED SERVICES RURAL HOSPITALS

Adjacency Combination	Airborne Sound Transmission Class (STC) ¹	
	Partitions	Floors
Patient care room to patient care room	45	40
Public space to patient care room ²	55	40
Service areas to patient care room ³	65	45
Patient care room access corridor ⁴	45	45

¹ Sound transmission class (STC) shall be determined by tests in accordance with methods set forth in American Society for Testing and Materials (ASTM) E90 and ASTM E4 13. Where partitions do not extend to the structure above, sound transmission through ceilings and composite STC performance must be considered.

² Public space includes corridors (except patient room access corridors), lobbies, dining rooms, recreation rooms, treatment rooms, and similar space.

³ Service areas include kitchens, elevators, elevator machine rooms, laundries, garages, maintenance rooms, boiler and mechanical equipment rooms, and similar spaces of high noise. Mechanical equipment located on the same floor or above patient care rooms, offices, nurses stations, and similar occupied space shall be effectively isolated from the floor.

⁴ Patient care room access corridors contain composite walls with door/windows and have direct access to patient care rooms. Junctions and joints of walls and partitions shall be sealed to prevent sound leakage under, over, or through the separation. Outlets shall be insulated and separated. Openings around ducts, conduits, and pipes shall be sealed to minimize sound transmission.

Types of wall construction and the associated STC ratings are given in Fire Resistance Design Manual available from Gypsum Association.

NOTE: The listed STC rating requirements are for a reasonable degree of privacy. Rooms requiring confidentiality, such as psychiatric examination rooms and rooms with extraordinary noise sources, may require additional sound insulation, including acoustical doors and seals.