

# APPENDIX K

## SOUND TRANSMISSION

### SECTION AK101 GENERAL

**AK101.1 General.** Wall and floor-ceiling assemblies separating dwelling units including those separating adjacent townhouse units shall provide air-borne sound insulation for walls, and both air-borne and impact sound insulation for floor-ceiling assemblies.

### SECTION AK102 AIR-BORNE SOUND

**AK102.1 General.** Air-borne sound insulation for wall and floor-ceiling assemblies shall meet a Sound Transmission Class (STC) rating of 45 when tested in accordance with ASTM E 90. Penetrations or openings in construction assemblies for piping; electrical devices; recessed cabinets; bathtubs; soffits; or heating, ventilating or exhaust ducts shall be sealed, lined, insulated or otherwise treated to maintain the required ratings. Dwelling unit entrance doors, which share a common space, shall be tight fitting to the frame and sill.

### SECTION AK103 STRUCTURAL-BORNE SOUND

**AK103.1 General.** Floor/ceiling assemblies between dwelling units or between a dwelling unit and a public or service area within a structure shall have an Impact Insulation Class (IIC) rating of not less than 45 when tested in accordance with ASTM E 492.

### SECTION AK104 REFERENCED STANDARDS

ASTM E 90-04 Test Method for Laboratory  
Measurement of Airborne Sound Transmission  
Loss of Building Partitions and Elements . . . . . AK102

ASTM E 492-04 (1996)e Specification for  
Laboratory Measurement of Impact Sound  
Transmission through Floor-ceiling Assemblies  
Using the Tapping Machine . . . . . AK103

