

— IBC minimum: STC 50 / IIC 50

— required for multifamily residential party assemblies

● Meets or exceeds code minimum

● Below code minimum — finish required

Tested Assembly

All assemblies on Girder-Slab® precast hollow core plank. Values from published test data.

STC
Airborne sound transmission

IIC
Impact isolation

50

50

BASE ASSEMBLIES — NO FLOOR FINISH

6" hollow core plank — bare slab, no finish	48	23
6" hollow core + ¾" gypsum concrete	50	41
6" hollow core + ¾" gypsum concrete on ½" sound-deadening board underlayment	56	50
6" hollow core + 2" 150 PCF structural topping	56	—
8" hollow core plank — bare slab, no finish	56	28
8" hollow core + 2" 150 PCF structural topping	59	31
10" hollow core plank — bare slab, no finish	50	—

VINYL FLOORING ASSEMBLIES

8" hollow core + ¾" vinyl tile	56	48
8" hollow core + ¾" vinyl tile + 1½" topping	58	49
8" hollow core + ¾" vinyl tile + 2" topping	59	50
8" hollow core + vinyl tile on ¼" foam underlayment	50	58
8" hollow core + vinyl tile adhered to ¼" inorganic felt cushion underlayment	54	51
8" hollow core + vinyl tile adhered to ½" plywood + 7/16" sound-deadening board	56	55
8" hollow core + 1½" topping + vinyl tile adhered to ¾" plywood + ½" sound-deadening board	54	55

WOOD FLOORING ASSEMBLIES

6" hollow core + ½" wood block flooring adhered directly	48	48
8" hollow core + ½" wood block flooring adhered directly	51	47
8" hollow core + ½" wood block + ½" sound-deadening board underlayment	52	54
8" hollow core + 1½" topping + ½" wood block + ½" sound-deadening board	51	53
8" hollow core + ½" wood block + ½" plywood + 7/16" sound-deadening board	52	55
8" hollow core + ¾" gypsum concrete + 5/16" wood block with foam backing	50	53
8" hollow core + 1½" topping + 5/16" wood block with foam backing	51	54
8" hollow core + ½" wood block + ½" sound-deadening board + suspended acoustical ceiling	59	61

CARPET ASSEMBLIES

6" hollow core + carpet and pad	50	69
6" hollow core + carpet and pad + ¾" gypsum concrete + ½" sound-deadening board	50	72
6" hollow core + 2" topping + 40 oz wool carpet + 50 oz hair pad	56	74
6" hollow core + 2" topping + shag carpet + foam rubber pad	56	76
8" hollow core + carpet and pad	56	73
8" hollow core + 1½" topping + carpet and pad	57	76
8" hollow core + 40 oz wool carpet + 50 oz hair pad	59	74
8" hollow core + 2" topping + 40 oz wool carpet + 50 oz hair pad	59	84
8" hollow core + shag carpet + foam rubber pad	56	76
8" hollow core + 2" topping + shag carpet + foam rubber pad	59	89

TILE ASSEMBLIES

8" hollow core + 1¼" reinforced mortar bed + 0.4" nylon matting	60	54
8" hollow core + 1¼" reinforced mortar bed + 0.4" nylon matting + suspended 5/8" gypsum board ceiling + 3½" insulation	61	62

STC (Sound Transmission Class) measures airborne sound isolation — voices, TV, music. IIC (Impact Isolation Class) measures impact sound — footsteps, dropped objects. IBC minimum for multifamily residential party assemblies: STC 50 / IIC 50. Values from published test data on Girder-Slab® precast hollow core plank. A dash (—) indicates no published value for that assembly. All assemblies tested per ASTM E90 (STC) and ASTM E492 (IIC). Project-specific assemblies should be verified with the acoustical consultant of record.