

# SOUND PART E



## SOUND: PART E TRANSITIONAL ARRANGEMENTS

ALL NEW DEVELOPMENTS CURRENTLY BEING CONSTRUCTED MUST FULLY COMPLY WITH TGD E 2014

## SOUND: PART E 2014 TRANSMISSION VALUES

<b>Table 1</b>	<b>Sound performance levels (Par. 1.1.1)</b>	
<b>Separating construction</b>	<b>Airborne sound insulation <math>D_{nT,w}</math> dB</b>	<b>Impact sound insulation <math>L'_{nT,w}</math> dB</b>
Walls	53 (min)	-
Floors (including stairs with a separating function)	53 (min)	58 (max)

NOTE: For works to protected structures, refer to paragraph 1.1.3

Table 1 sets out minimum and maximum airborne and impact sound performance levels. It should be noted that these are a significant tightening on levels specified in the 1997 requirements.

**MIN 4 dB BETTER WALLS**

**MIN 5 dB BETTER FLOORS**

## SOUND: PART E REQUIREMENTS FOR TESTING

### **Mandatory requirement to do post completion testing**

- May be on or after 1 July 2015
- New dwellings
- Material change of use
- At a stage when dwellings either side are essentially complete
- A proportion of all dwellings on a site must be tested
- Testing to be between rooms sharing common separating wall
- Impact sound tests to be carried out without soft covering

**Table 3A** Minimum frequency of testing per group or sub-group type (Par. 2.2.3)

Number of attached dwellings	'Sets of tests' required
4 or less	At least 1 <sup>1</sup>
Greater than 4 but less than or equal to 20	At least 2
Greater than 20 but less than or equal to 40	At least 2 + 10% x No. of attached dwellings greater than 20
Greater than 40 but less than or equal to 1000	At least 4 + 5% x No. of attached dwellings greater than 40
More than 100	At least 7 + 5% x No. of attached dwellings greater than 100

**NOTES**

1. This also satisfies the initial testing requirements (see paragraph 2.2.2)
2. Refer to Table 2 for number of individual tests required in a set of tests
3. Round up to the nearest whole number
4. Refer to paragraph 2.3 where constructions other than those detailed in sections 3 and 4 are used

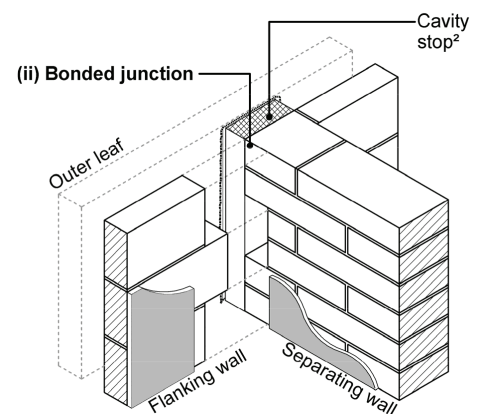
# SOUND: PART E MINIMUM FREQUENCY OF TESTING

**TABLE 3A**

- Assumes no "fails"
- Applicable for construction types in Section 3 and 4
- Test more frequently at the beginning of a series of completions, to allow problems to be addressed at an early stage.
- On large developments testing should be carried out over a substantial part of the construction period.

## SITE PRACTICE - POINTS TO WATCH

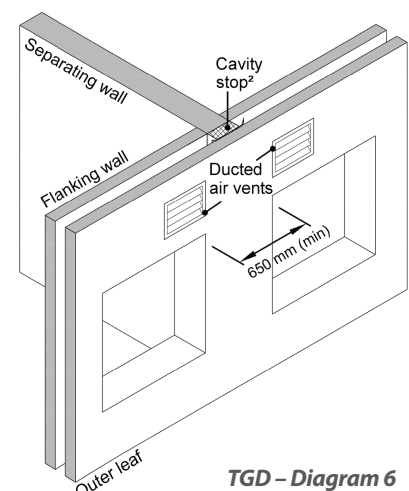
- Single course stretcher bond
- Fill all joints
- Plaster walls
- Provide adequate mass (average 415 kg/m<sup>2</sup>)
- Avoid air paths
- Key junctions
- Avoid chasing/holes
- 650mm between windows, doors and vents
- Cavity Stop (sound and fire) – New requirement in semi detached
- Flanking can cause up to 10dB difference



TGD E – Diagram 5

**All Roadstone Dense aggregate concrete Blocks have a Density > 1900kg/m<sup>3</sup>**

Type	Wall Type	dB
7.5N Solid	245mm Solid wall Rendered	55
23N Solid	245mm Solid wall Rendered	56
7.5N Liteblock	245mm Solid wall Rendered	53
7.5N Liteblock	275mm Cavity wall Rendered (insulated)	57
23N Solid	275mm Cavity wall Rendered	54
13N Aristocrat Solid	210 Solid un-rendered Collar tied	51
13N Aristocrat 215mm Cavity	215mm Cavity Wall Un-rendered	51



TGD – Diagram 6



[www.roadstone.ie](http://www.roadstone.ie)

Phone: 01 404 1200

Email: [info@roadstone.ie](mailto:info@roadstone.ie)

