

3.12.1.5

Floors

A suspended floor, other than an intermediate floor in a building with more than one storey—

- (i) must achieve the *Total R-Value* specified in Table 3.12.1.4; and

Table 3.12.1.4 SUSPENDED FLOOR – MINIMUM TOTAL R-VALUE

Climate Zone	1	2	3	4	5	6	7	8
	Direction of heat flow							
	Upwards			Downwards				
Minimum Total R-Value	1.5	1.0	1.5	2.25	1.0	2.25	2.75	3.25
Note:								
For an enclosed perimeter treatment, the underfloor airspace and its enclosure may be included in the <i>Total R-Value</i> calculation.								

- (ii) with an in-slab heating or cooling system, must be insulated—
 - (A) around the vertical edge of its perimeter with insulation having an *R-Value* of not less than 1.0; and
 - (B) underneath the slab with insulation having an *R-Value* of not less than 2.0 which may include insulation installed to meet the requirements of (i); and
- (iii) that is enclosed beneath, must have a barrier to prevent convection installed below floor level between the airspace under the floor and any wall *cavities*.

Explanatory information:

1. An enclosed perimeter treatment means that the airspace under the floor is enclosed between ground and floor level by walls which have only the *required* sub-floor vents.
2. The barrier *required* by 3.12.1.5(a)(iii) could be an imperforate flashing.
3. An under-tile or in-screed heating system in a bathroom, amenity area or the like, is not considered to be an in-slab system.
4. Specific solutions for concrete slab and timber floors can be found in documents and online resources prepared by industry associations and product suppliers.