

## Spain: Summary of Building Types, Vulnerability to Collapse and Occupancy

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WHE Construction Type or Material <i>refer to Table 2 for suggested category(ies)</i>	Description of construction type (type of load- bearing structure)  <i>(refer to Tables 2 and 3 for suggested categories and sources of data to help answer this question)</i>	Estimate of probability of collapse (%) of the building type when subjected to the specified shaking intensity (expressed as a range)  <i>(refer to instructions page 5)</i>  <b>(3)</b> <b>MMI / EMS / MSK</b>				Fraction of population who LIVES in this building type  <i>(refer to instructions for help in estimating)</i>		Fraction of WORKING population who WORKS in this building type  <i>(refer to instructions on page 5 for help in estimating)</i>		Peak average number of occupants per building  <i>(refer to instructions on page 5 for help in estimating)</i>
		IX (~0.65-1.24g)	VIII (~0.34-0.65g)	VII (~0.18-0.34g)	VI (~0.092-.18g)	urban areas (4)	rural areas (5)	urban areas (6)	rural areas (7)	(8)
		(1)	(2)							
7	floors and roof slabs made of wood or steel beams with with ceramics	----	15	6.7	1.4	15%	23%	12%	16%	32
9	floors and roof slabs made of concrete beams with ceramics	----	11	6	1	31	36	18	18	46
17	waffle slabs or slabs with wide beams; both structures with	----	4	2	1	46	38	69	66	81
23	the slabs are flat slabs (waffle slabs or slabs with wide beams)	----	1	0.3	0	5	2	1	0	72
24	walls are not cast in-situ but masonry infill walls	----	1	0.3	0	2	0	0	0	65
31	with brick masonry infill	----	1	0.5	0	1	1	0	0	6

Refer to Part 3 (next 3 pages) for tables and links that may help you fill out this form.

### Other sources consulted:

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Other sources: Instituto Nacional de Estadística (INE) ([www.ine.es](http://www.ine.es)) and Departamento de Estadística del Ayuntamiento de Barcelona ([www.bcn.es](http://www.bcn.es))