

2.2.2. Number of reinforced concrete buildings

As the masonry buildings, the estimation of the apartments per story for reinforced concrete buildings are obtained from the UESF data for each commune. If a certain commune does not have reinforced concrete buildings, the average apartments per story at regional level is used, and if the region does not have reinforced concrete buildings, the national average is used. Figure 2.2 shows the apartments per story at regional level and the national average for reinforced concrete buildings based on the UESF data. Reinforced concrete buildings have on average 6.8 apartments per story.

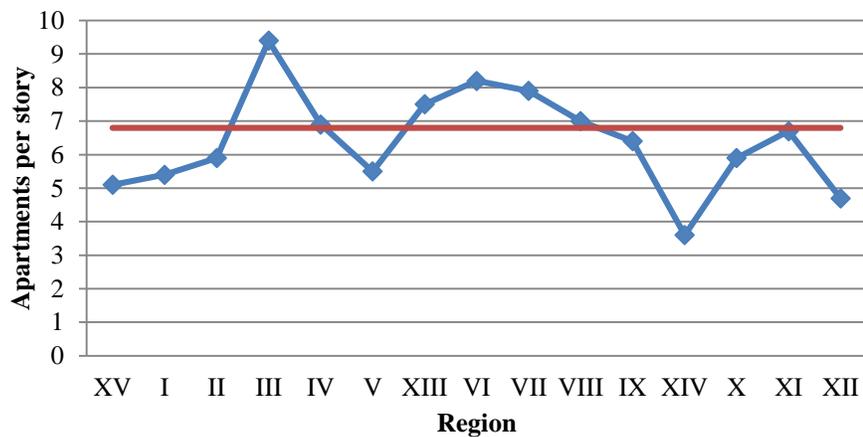


Figure 2.2: Average apartments per story in each region for reinforced concrete buildings (INE, 2014b)

The methodology to obtain the total number of reinforced concrete buildings is the following:

- i) Distribution of apartments in urban and rural areas: The 2002 Census apartments (or dwellings) in reinforced concrete buildings are separated by location in urban and rural (data by census blocks). Communal UESF apartments and buildings were also separated into urban and rural areas.
- ii) Distribution of apartments by stories: The number of apartments in buildings with different stories were obtained from the UESF data (e.g. apartments in 3-story buildings to apartments in 40-story buildings). These percentages are applied to the prior to 2002 apartments from census data to estimate the number of dwellings located in buildings of different height at census block level.
- iii) Estimation of number of buildings by building height: With the number of apartments per story in each commune, the prior to 2002 apartments were converted into number of buildings of different height.

Finally, the UESF buildings are added to the prior 2002 buildings at the census block level by assuming a uniform distribution to complete the total number of reinforced concrete buildings.

A detailed example of the application of this methodology for reinforced concrete buildings is presented in Appendix B.