

Post-Occupancy Evaluation Report of Ahmet Aga Mansion, Izmir

The post occupancy evaluation study is conducted with 30 occupants of Ahmet Aga Mansion between 24.02 and 28.02.2020. It represents 75% of totally 40 users of this office building. The half of participants are female. The average age is 39.5, while 43% and 40% of occupants are between 30 -39, and 40 – 49, respectively.

Totally 18 questions were asked to analyse **use of HVAC system** and **comfort conditions** in the building. Eight of questions are multiple choice, while the rest are open-ended questions. The questions and related answers are presented as follows:

USE OF HVAC SYSTEM

- ***Is there any period when the air conditioners are turned off in your room? Do you feel comfortable when the air conditioners are not working? In which month, if you feel comfortable?***

Totally 26 participants answered this question. Nearly more than half of them (65%) are turned off their room-based air conditioners at mid-seasons, i.e. Spring (March and April) and Fall (October), while 20% of people use for whole year.

- ***What time do you turn on the air conditioners?***

All participants answered this question. Except one person, all users of the building operate their heating/cooling system by the beginning of their work hours.

- ***Do you turn off the air conditioners when you leave the room? If yes, what time do you turn off?***

Totally 28 participants answered this question. Users (%60) mostly close the system by the end of their working hours between 16:30 and 17:30.

- ***Do you turn off the air conditioners during lunch break?***

All participants answered this question. 53% of participants mentioned that they turn off the room conditioners during lunch break.

- ***Do you open a window while the room is heated? If so, how much of the window do you open?***

Totally 29 participants answered this question. 17 of participants (59%) partly open the windows while heated, 11 of them keep close, and one person opens half of the window.

- ***Do you open a window while the room is cooled? If so, how much of the window do you open?***

Totally 27 participants answered this question. Users (%63) partly open their windows when cooling is operated, while one-third of them keep close the window.

- ***Do you open a door while the room is heated? If so, how much of the window do you open?***

Totally 29 participants answered this question. 11 of participants (38%) keep open half of the door while heated, 5 of them keep completely open. Only 21% mention that the doors area closed when heated.

- ***Do you open a door while the room is cooled? If so, how much of the window do you open?***
Totally 26 participants answered this question. Only 19% of participants mention that the doors area closed when it is cooled. The rest keeps the door is to be open: 35%, 27% and 19% are half, partly and totally, respectively.

COMFORT CONDITIONS

- ***Could you describe your comfort condition in the winter months including the heating period according to the following rating?***
All participants answered this question. Nearly all of the office users feel warm (53%) and hot (43%), while only one person feels calm.
- ***Could you describe your comfort condition in the summer months including the cooling period according to the following rating? (hot/warm/neutral/calm/cold)***
Totally 28 participants answered this question. 54% of the users feel calm, while 25% of them feel warm (25%). Only 2 persons feel neither hot or cold.
- ***Could you describe the natural lighting level according to the following rating? (very bad/bad/neutral/well/very well)***
All participants answered this question. 40% of the building users find the natural lighting levels in their rooms as “bad.” The ones mentioning neither bad or good, but “neutral,” are one-third of participants. 27% of the users find well (20%) and very well (7%).
- ***Could you describe the artificial lighting level according to the following rating? (very bad/bad/neutral/well/very well)***
Totally 29 participants answered this question. 45% of the building users satisfied with the artificial lighting levels in their rooms by mentioning as “neutral.” Yet, the rest is divided by 28% as bad, and 24% as well.
- ***Do you keep closed your sun shades at windows?***
Totally 29 participants answered this question. More than half of participants (55%) keep their shades open during office hours. 17% of people prefer to close, while the rest partly closes the shades.
- ***If you close your sun shades, what time of the day do you close them?***
Only 13 participants answer this question. 46% of them close the sun shades all day long. The shading is needed for some user (38%) in the particular hours of the day, while the rest uses it half of the day according to the location of the room.

- ***Do you believe it is possible to reduce energy consumption in historical buildings? If you believe, what kind of precautions do you think can be taken in the building and its use?***
 Only 19 participants answer this question. More than three-third of participants (84%) underline the possibility of reducing energy consumption in the historic buildings. The need for proper insulation, thermally upgraded window use, increased airtightness, obeying set point temperature standards for offices and diminishing user oriented energy losses such as changing and monitoring user behaviour are among the propels by the participants. The rest thinks that the energy reduction is not possible for historic buildings.
- ***Could you describe your views about the heating, cooling and lighting of the meeting room in accordance with the following degrees? (very bad/bad/neutral/well/very well)***

 - a. Totally 26 participants answered this question for heating. They express their satisfaction in three levels. The heating conditions of meeting room are found very well, well and neutral by 69%, 19% and 12% of people, respectively.
 - b. Totally 24 participants answered this question for cooling. They express their satisfaction in four levels. The cooling conditions of meeting room are found well, neutral, very well and bad by 63%, 17%, 13% and 8% of people, respectively.
 - c. Totally 26 participants answered this question for lighting. They express their satisfaction in three levels. The lighting conditions of meeting room is found well, bad and neutral by 62%, 23% and 15% of people, respectively.
- ***Could you describe your views about the heating, cooling and lighting of the entrance halls in accordance with the following degrees? (very bad/bad/neutral/well/very well)***

 - a. Totally 28 participants answered this question for heating. They express their satisfaction in four levels. The heating conditions of entrance halls are found bad, well, neutral and very bad by 46%, 29%, 14% and 11% of people, respectively.
 - b. Totally 24 participants answered this question for cooling. They express their satisfaction in five levels. The cooling conditions of entrance halls are bad, well, neutral very good and very bad by 38%, 33%, 21%, 4% and 4% of people, respectively.
 - c. Totally 27 participants answered this question for lighting. They express their satisfaction in four levels. The lighting conditions of entrance halls are found bad, well, neutral and very bad by 48%, 26%, 22% and 4% of people, respectively.