**Appendix A.**

Material parameters of the wall

|  |  |  |
| --- | --- | --- |
| Material of layer | Thickness (mm) | Thermal conductivity (W (m-1℃-1)) |
| 1:3 cement mortar of outer wall | | 12 | 0.93 |
| Insulation mortar of outer wall | | 60 | 0.29 |
| Moisture proof mortar of outer wall | | 17 | 0.93 |
| Brick of outer wall | | 370 | 0.81 |
| 1:2.5 cement mortar of outer wall | | 6 | 0.93 |
| 1:2.5 cement mortar of inner wall | | 6 | 0.93 |
| Moisture proof mortar of inner wall | | 17 | 0.93 |
| Brick of inner wall | | 240 | 0.81 |
| 1:2.5 cement mortar of inner wall | | 6 | 0.93 |
| Insulation of roof | | 100 | 0.04 |
| Moisture proof of roof | | 20 | 0.1 |

**Appendix B.**

Constants for component costs [45]

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Constant | Value | Constant | Value | Constant | Value |
|  | 1.63 |  | 1.4398 |  | 1.0 |
|  | 1.66 |  | -0.1776 |  | 3.5 |
|  | 1.89 |  | 2.2897 |  | 2.7 |
|  | 1.35 |  | 1.3604 |  | 2.2 |
|  | 4.3247 |  | -0.1027 |  |  |
|  | -0.3030 |  | 0.03881 |  |  |
|  | 0.1634 |  | -0.11272 |  |  |
|  | 3.3892 |  | 0.08183 |  |  |
|  | 0.0536 |  | -0.3635 |  |  |
|  | 0.1538 |  | 0.3957 |  |  |
|  | 2.7051 |  | -0.0026 |  |  |