

ISO 23045:2008-12 (E)

Building environment design - Guidelines to assess energy efficiency of new buildings

| Contents | | Page |
|-----------------------|---|-------------|
| Foreword | | iv |
| Introduction | | v |
| 1 | Scope | 1 |
| 2 | Normative references | 1 |
| 3 | Terms and definitions | 1 |
| 4 | Fundamentals on energy efficiency | 2 |
| 4.1 | General | 2 |
| 4.2 | Project information in relation to energy efficiency | 2 |
| 4.3 | Introducing the energy efficiency framework | 4 |
| 4.4 | Renewable energy integration | 5 |
| 5 | Expression of efficiency indicators | 6 |
| 5.1 | General | 6 |
| 5.2 | Indicators related to the performance of the building envelope | 6 |
| 5.3 | Indicators related to integrated energy performance of the building including systems | 6 |
| 5.4 | Secondary indicators | 7 |
| 6 | Design process | 8 |
| 6.1 | General | 8 |
| 6.2 | Stage I -- Conceptual design | 8 |
| 6.3 | Stage II -- Schematic design | 8 |
| 6.4 | Stage III -- Detail design | 9 |
| 6.5 | Stage IV -- Final design | 10 |
| 7 | Influential parameters | 10 |
| 7.1 | General | 10 |
| 7.2 | Building environment | 10 |
| 7.3 | Building characteristics | 10 |
| 7.4 | Building use | 10 |
| 7.5 | Calculation tools | 10 |
| 8 | Uses for energy performance indicators | 11 |
| 8.1 | General | 11 |
| 8.2 | Standard assets | 11 |
| 8.3 | Other parameters | 11 |
| Annex A (normative) | Energy efficiency flowchart | 12 |
| Annex B (informative) | Global basic energy scheme | 13 |
| Annex C (informative) | Thermal load due to persons | 14 |
| Annex D (informative) | Thermal load due to lighting | 15 |
| Annex E (informative) | Thermal load due to equipment | 16 |

| | |
|---|-----------|
| Annex F (informative) Default net energy value for fuels | 17 |
| Bibliography | 18 |