ISO 19454:2019 (E)

Building environment design — Indoor environment — Daylight opening design for sustainability principles in visual environment

Contents

Foreword

Introduction

- 1 Scope
- 2 Normative references
- 3 Terms and definitions
- 4 Fundamentals
 - 4.1 General
 - 4.2 General principles of sustainability
 - 4.3 Project information
 - 4.4 Framework of generation and verification
 - 4.5 Framework of documentation at approval
 - 4.6 Harmonization of architectural and daylight opening design
- 5 Design elements of daylight openings
 - 5.1 General
 - 5.2 Matrix of aspects of daylight opening design
 - 5.3 Daylight opening ratio to the wall area
 - 5.4 Daylight opening ratio to the floor area
 - 5.5 Levels of indoor daylight and the extent of sunlight
 - 5.6 Quality of views to exterior
 - 5.7 Daylight control systems in the building
- 6 Design process of daylight openings
 - 6.1 General
 - 6.2 Stage I Formulation of project definition
 - 6.2.1 Project definition
 - 6.2.2 Output Document I
 - 6.2.3 Evaluation I
 - 6.2.4 Output Approval of document I
 - 6.2.5 Iteration
 - 6.3 Stage II Schematic design
 - 6.3.1 General
 - 6.3.2 Input
 - 6.3.3 Output
 - 6.3.4 Evaluation II
 - 6.3.5 Approval of document II
 - 6.4 Stage III Detailed design
 - 6.4.1 General
 - 6.4.2 Input
 - 6.4.3 Output Document Illa
 - 6.4.4 Analysis
 - 6.4.5 Output Document IIIb
 - 6.4.6 Evaluation III
 - 6.4.7 Approval of documents Illa and Illb
 - 6.4.8 Iteration into detail design
 - 6.5 Stage IV Final design
 - 6.5.1 General
 - 6.5.2 Commissioning documents

- 6.5.3 Cost estimation
- 6.5.4 Output: the final documents
- Annex A (normative) Flow diagram of the design process
- Annex B (informative) Basic architectural forms of the daylight opening
 - B.1 Side lighting
 - B.2 Top lighting
- Annex C (informative) Matrix of aspects of daylight opening design
- Annex D (informative) Matrix of output required to satisfy daylight opening design

Page count: 26