

ISO/TR 5863:2025-01 (E)

Integrative design of the building envelope - General principles

Contents		Page
Foreword		iv
Introduction		v
1	Scope	1
2	Normative references	1
3	Terms and definitions	1
4	Design philosophy and principles for the building envelope	3
4.1	General	3
4.2	One thing increases, another decreases	4
4.3	One structure variable relates to several function and behaviour variables	5
4.4	Appropriate balance among the behaviours of environmental elements	5
5	Functions of the building envelope	5
5.1	General	5
5.2	Flexibility	5
5.3	Adaptability	6
5.4	Reusability	6
6	Structure of the building envelope	6
6.1	General	6
6.2	Roof system	7
6.3	Wall system above the ground	8
6.4	Wall system underground	9
6.5	Base floor system	10
7	Behaviour of the building envelope	10
7.1	General	10
7.2	Thermal performance	10
7.3	Daylight and visual information	11
7.4	Ventilation	12
7.5	Sound proofing	13
7.6	Airtightness	13
7.7	Moisture protection	13
7.8	Sustainability and integration with technical building systems	14
8	Relationship, synergies and trade-offs	14
9	Adaptive building envelope	15
10	Integrative design process for the building envelope	16
11	Building envelope commissioning (BECx)	16
Bibliography		18