

ISO 20887:2020-01 (E)

Sustainability in buildings and civil engineering works - Design for disassembly and adaptability - Principles, requirements and guidance

Contents		Page
	Foreword	v
	Introduction	vi
1	Scope	1
2	Normative references	1
3	Terms and definitions	1
4	Decision-making framework	7
4.1	General.....	7
4.2	Developing the client brief.....	7
4.3	Design strategies.....	8
4.3.1	General considerations.....	8
4.3.2	Durability considerations.....	9
4.4	Levels and scope of analysis.....	9
4.4.1	General.....	9
4.4.2	Systems.....	10
4.4.3	Elements.....	10
4.4.4	Component or assembly.....	10
4.4.5	Subcomponent.....	10
4.4.6	Material.....	10
5	Principles of design for disassembly and adaptability	11
5.1	General.....	11
5.2	Adaptability principles.....	11
5.2.1	General.....	11
5.2.2	Versatility.....	11
5.2.3	Convertibility.....	12
5.2.4	Expandability.....	13
5.3	Disassembly principles.....	13
5.3.1	General.....	13
5.3.2	Ease of access to components and services.....	14
5.3.3	Independence.....	14
5.3.4	Avoidance of unnecessary treatments and finishes.....	16
5.3.5	Supporting re-use (circular economy) business models.....	16
5.3.6	Simplicity.....	18
5.3.7	Standardization.....	18
5.3.8	Safety of disassembly.....	19
6	Documentation and information	20
6.1	General.....	20
6.2	Design details.....	20
6.3	Material constituents and manufacturers.....	20
6.4	Connection detailing.....	20
6.5	Data digitisation.....	21
6.6	Information transfer and management.....	21
7	Continuing implementation of DfD/A	21
7.1	General.....	21
7.2	Product and component suppliers.....	22
7.3	Construction.....	22
7.4	Handover/commissioning.....	22

7.5	Use stage.....	22
7.6	Refurbishment.....	22
7.7	End-of-life/decommissioning.....	23
7.8	Education and capacity building.....	23
Annex A (informative) Feasibility assessment of design for disassembly options for elements or components/assemblies		24
Annex B (informative) Developing end-of-life scenarios		27
Annex C (informative) Measuring performance.....		30
Bibliography		34