1.	Record Nr.	UNINA9910145439903321
	Titolo	Lightweight sandwich construction [[electronic resource] /] / edited by J.M. Davies
	Pubbl/distr/stampa	Oxford ; ; Malden, MA, : Blackwell Science, c2001
	ISBN	1-281-31973-2 9786611319731 0-470-69025-9 0-470-77996-9
	Descrizione fisica	1 online resource (386 p.)
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	Disciplina	624.1/779 624.1779
	Soggetti	Sandwich construction Lightweight construction
	Lingua di pubblicazione	Inglese
	Formato	Materiale a stampa
	Livello bibliografico	Monografia
	Note generali	"Published on behalf of CIB Working Commission, W056 Sandwich Panels (joint CIB-ECCS commission)."
	Nota di bibliografia	Includes bibliographical references and index.
	Nota di contenuto	Contents; List of Contributors; Preface; 1 Introduction; 1.1 The origins of sandwich technology; 1.2 Principles of sandwich construction; 1.3 Requirements for sandwich cladding panels; 1.4 Wall panels; 1.5 Panels for cold stores; 1.6 Roof panels; 1.7 Methods of manufacture; 1.7.1 Manufacture of facings; 1.7.2 Panels with bonded cores; 1.7.3 Foamed cores; 1.8 Design requirements for structural sandwich panels; 1.9 Structural design of sandwich panels; 1.10 Layout of this book; 2 Materials; 2.1 Introduction; 2.2 Facing materials; 2.2.1 Steel facings; 2.2.2 Aluminium sheeting 2.2.3 Other metal face materials2.2.4 Other facing materials; 2.3 Core materials; 2.3.1 Rigid plastic foam materials; 2.3.2 Characteristic properties of rigid foams; 2.3.3 Inorganic core material; 2.3.4 Characteristic properties of mineral wools; 2.4 Honeycomb cores; 2.5 Adhesives and other components; 2.7 References; 3 Thermal Performance and Water-Tightness; 3.1 Introduction; 3.2 Insulation theory; 3.2.1 Factors influencing the thermal conductivity of a material;

3.3 Thermal resistance

	 3.3.1 Total thermal resistance of a building element3.4 Thermal transmittance coefficient (U-value); 3.4.1 Calculation method for profiled panels; 3.5 Thermal capacity; 3.6 Thermal bridges; 3.7 Airtightness; 3.7.1 Test methods for air-tightness; 3.8 Water-tightness; 3.8.1 Test methods for water-tightness; 3.9 Moisture; 3.9.1 Surface condensation; 3.9.2 Moisture transfer; 3.10 Thermographic surveys; 3.11 The advantage of sandwich construction in the context of thermal insulation; 3.12 Energy saving; 3.13 Reference; 4 Acoustics; 4.1 Introduction; 4.2 What is sound?; 4.2.1 Decibel arithmetic 4.3 Fundamental acoustic parameters4.4 Sound insulation; 4.4.1 Example 1; 4.5 Weighted sound reduction index; 4.6 Overall sound reduction index; 4.6.1 Example 2; 4.7 Flanking transmission; 4.8 Sound reduction index for holes and slits; 4.9 Sound reduction index for a sandwich panel; 4.10 Sound in rooms; 4.10.1 Sound absorption; 4.10.2 Sound absorption for sandwich panels; 4.11 Noise reduction in large industrial premises; 4.12.1 Reverberation time; 4.12.2 Room classification; 4.12.3 Sound propagation 4.12.4 General sound level reduction4.12.5 Example 4; 4.13 References; 5 Fire; 5.1 General aspects of fire behaviour; 5.1.1 Introduction; 5.1.2 Objectives of fire safety design; 5.1.3 Phases of a fire; 5.1.4 Assessment of the threat to life; 5.1.5 Fire severity; 5.1.6 Introduction to reaction to fire; 5.1.7 Introduction to fire resistance; 5.1.8 Fire safety legislation; 5.1.9 Large-scale fire tests and experience of actual fires; 5.2 Fire tests; 5.2.1 Use of standard fire tests; 5.2.2 Reaction-to-fire tests; 5.2.3 Fire resistance tests; 5.3 Material properties at elevated temperature 5.3.1 Face materials
Sommario/riassunto	Sandwich panels are being used increasingly as the cladding of buildings like factories, warehouses, cold stores and retail sheds. This is because they are light in weight, thermally efficient, aesthetically attractive and can be easily handled and erected. However, to date, an authoritative book on the subject was lacking. This new reference work aims to fill that gap. The designer, specifier and manufacturer of sandwich panels all require a great deal of information on a wide range of subjects. This book was written by a group of European experts under the editorship of a UK specialist