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Nota di contenuto	Note to Readers: -- Table of Contents -- Introduction -- Process Overview & Acknowledgements -- Development Timeline -- 1 Site Exterior Noise -- 1.1 General -- 1.2 Applicable Federal, State, and Local Codes and Regulations -- 1.3 Classification of non-facility produced exterior noise exposure -- 1.3.1 Exterior noise classifications -- A1.3 Procedure for determining composite sound transmission class rating (STCc) -- 1.4 Classification of facility produced exterior noise exposure -- 1.4.1 Heliports -- 1.4.2 Emergency power generators -- 1.4.3 Outdoor mechanical equipment -- 1.4.4 Building services -- 2 Acoustical Finishes and Details -- 2.1 General -- 2.2 Applicable Federal, State and Local Codes and Regulations -- 2.3 Design Criteria for Acoustical Finishes -- A2.3 Determination of Design Room Average Sound Absorption Coefficient ( design) and Room Sound Absorption Factors (AR, sf) -- 2.4 Considerations for NICUs (from Standard 21: Ceiling Finishes) -- A2.4.2 Interpretation: -- 3 Room Noise Levels -- 3.1 General -- 3.2 Federal, State and Local Codes, Regulations, and Guidelines -- 3.3 Design Criteria for Room Noise Levels -- 3.4 Conformance measurements of room sound level -- A3.4.1 Determination of Room Noise Level -- A3.4.2 Effect of Background Noise on Clinical Hearing Ability -- A3.4.3 Discussion of Background Noise Rating Criteria -- 3.5 Considerations for NICUs (from Standard

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## Sommario/riassunto

Sound, vibration, noise and privacy have significant impacts on health and performance. As a result, they are recognized as essential components of effective health care environments. However, acoustics has only recently become a prominent consideration in the design, construction, and operation of healthcare facilities owing to the absence, prior to 2010, of clear and objective guidance based on research and best practices. Sound & Vibration 2.0 is the first publication to comprehensively address this need. Sound & Vibration 2.0 is the sole reference standard for acoustics in health care facilities and is recognized by: the 2010 FGI Guidelines for the Design and Construction of Health Care Facilities (used in 60 countries); the US Green Building Council's LEED for Health Care (used in 87 countries); The Green Guide for Health Care V2.2; and the International Code Council (2011). Sound & Vibration 2.0 was commissioned by the Facility Guidelines Institute in 2005, written by the Health Care Acoustics Working Group (a permanent committee of the Acoustics Research Council [ARC], comprised of members of leading professional societies in acoustics, noise control engineering, acoustical consulting and related professions) and published in 2010 by the Facility Guidelines Institute and the American Hospital Association, ASHE division. ARC organized the 520-member health care Working Group in 2004-5 drawing its members from ten constituencies that range from medicine to law, public policy, architecture, design and engineering in order to provide constructive, guidance on sound and vibration based on research and best practices. Sensible acoustical and privacy planning in the early design stages of a healthcare facility project can be solved effectively and affordably with a few strokes of the designer's pencil. The recommended minimum design requirements presented in this work are intended to aid designers in achieving satisfactory acoustical and privacy environments in healthcare facilities. This handbook includes comprehensive, practical, and measureable guidelines for all aspects of acoustics in the design, construction, and evaluation of all types of healthcare facilities, including large general hospitals,

specialized patient care facilities, and ambulatory patient care facilities.

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