



Standard Guide for Building Enclosure Commissioning¹

This standard is issued under the fixed designation E2947; the number immediately following the designation indicates the year of original adoption or, in the case of revision, the year of last revision. A number in parentheses indicates the year of last reapproval. A superscript epsilon (ε) indicates an editorial change since the last revision or reapproval.

1. Scope

1.1 *Purpose*—This guide provides procedures, methods and documentation techniques that may be used in the application of the building enclosure commissioning (BECx) process. This guide is complementary to Practice E2813 and is aligned with ANSI/ASHRAE/IES Standard 202 and ASHRAE Guideline 0.

1.2 *Extent*—The process outlined in this standard guide applies to each building delivery phase from pre-design through Owner occupancy and operation. The specific application of this guide may vary to suit the Owner, the project delivery method and the building project as outlined in the Owner's Project Requirements (OPR).

1.3 *Primary Focus*—The primary focus of this process includes, but may not be limited to, new construction of building enclosures, existing building enclosures undergoing substantial renovation or alteration, and continuous commissioning of enclosure systems.

1.4 *Contractual and Regulatory Obligations*—The methods described in this guide are not intended to supersede or otherwise replace the contractual obligations reserved specifically for the parties responsible for the design and construction of a building or structure, nor to alter the roles, responsibilities and duties that may otherwise be assigned to those parties by applicable regulatory or statutory law.

1.5 *This standard does not purport to address all of the safety concerns, if any, associated with its use. It is the responsibility of the user of this standard to establish appropriate safety and health practices and determine the applicability of regulatory limitations prior to use.*

2. Referenced Documents

2.1 ASTM Standards:²

E631 Terminology of Building Constructions

¹ This guide is under the jurisdiction of ASTM Committee E06 on Performance of Buildings and is the direct responsibility of Subcommittee E06.55 on Performance of Building Enclosures.

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² For referenced ASTM standards, visit the ASTM website, www.astm.org, or contact ASTM Customer Service at service@astm.org. For *Annual Book of ASTM Standards* volume information, refer to the standard's Document Summary page on the ASTM website.

E2813 Practice for Building Enclosure Commissioning

2.2 ASHRAE Guidelines and Standards:³

ANSI/ASHRAE/IES Standard 202 Commissioning Process for Buildings and Systems

ASHRAE Guideline 0 The Commissioning Process

3. Terminology

3.1 *Definitions*—Refer to the most current edition of the following:

3.1.1 ASTM E631 Terminology of Building Constructions.

3.1.2 ASHRAE Guideline 0, Section 4, Definitions.

3.1.3 ANSI/ASHRAE/IES Standard 202, Section 3, Definitions.

3.2 *Definitions of Terms Specific to This Standard:*

3.2.1 The following definitions, abbreviations, and acronyms are specific to the implementation of the commissioning process for building enclosure systems. These definitions are applicable throughout this guideline. Terms that are not defined have their ordinarily accepted meanings within the context in which they are used.

3.2.2 *basis of design, BOD, n*—a document developed by the design team that records the technical concepts, assumptions, calculations, decisions, and product selections used to meet the Owner's Project Requirements and to satisfy applicable regulatory requirements, standards and guidelines.

3.2.2.1 *Discussion*—The BOD document includes both narrative descriptions and lists of individual items that supports the design process.

3.2.3 *bidding and negotiation phase, n*—preparatory phase of the construction process delivery that assists in the solicitation and selection of prospective bidders, including evaluation of requests for information, substitutions, development of Addenda, review of bids and qualifications and the award of trade contracts.

3.2.3.1 *Discussion*—This phase is followed by the pre-construction sub-phase.

3.2.4 *building enclosure, n*—the terms “building enclosure” and “enclosure” refer collectively to materials, components, systems, and assemblies intended to provide shelter and

³ Available from American Society of Heating, Refrigerating, and Air-Conditioning Engineers, Inc. (ASHRAE), 1791 Tullie Circle, NE, Atlanta, GA 30329, <http://www.ashrae.org>.