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ASHRAE Guideline 1.3-2026
Application of the Commissioning Process to Building Operation and Maintenance Training

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NOTE

Approved addenda, errata, or interpretations for this guideline can be downloaded free of charge from the ASHRAE website at www.ashrae.org/technology.

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Preview

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(This foreword is not part of this guideline. It is merely informative and does not contain requirements necessary for conformance to the guideline.)

FOREWORD

Guideline 1.3 provides guidance on implementing the training aspects of the Commissioning Process (Cx) as outlined in ASHRAE Guideline 0, The Commissioning Process for New Buildings and New Systems*, and ASHRAE Guideline 0.2,* The Commissioning Process for Existing Systems and Assemblies*. Such training is directed toward the facility's operations and maintenance (O&M) personnel. These personnel may be employed in-house or work under a service contract. The objective of this training is to allow the Owner to fully benefit from the Cx by having well-informed staff to perform ongoing building operations.*

Occupancy and Operations is defined as a key phase of the project acquisition process under Guideline 0 and Guideline 0.2. During this phase, the project Owner begins to use the facility with the support of the Cx Team. At the end of this phase, the Owner assumes full responsibility for correctly and effectively operating and maintaining the project's systems and assemblies. O&M personnel who understand the project objectives, Basis of Design (BoD), and the nature of the incorporated systems and assemblies and expectations for their appropriate use will be better positioned to assist in achieving the Owner's Project Requirements (OPR) and Current Facility Requirements (CFR) well into the service life of the project. Access to, and understanding of, benchmarks for systems' performance will also assist in ongoing operations.

The primary focus of this guideline is O&M personnel. Building users, however, might also be candidates for training under the Cx when their actions (or inactions) can affect expected building performance outcomes. Examples of such situations include manipulation of interior shading devices for daylighting control, use of operable windows for ventilation, or user control of thermostats.

The training requirements described in this guideline span the four project phases defined in Guideline 0 or Guideline 0.2: Predesign or Planning, Design or Investigation, Construction or Implementation, and Occupancy and Operations or Hand-Off. Training under the Cx may occur during the later Phases of the project. Such training must be anticipated during Predesign or Planning and solidified during the Design or Investigation Phase when the project specifications or corrective actions are completed. The need for the Design Team to deal with training as part of the Cx must be conveyed before design contracts are signed (i.e., during Predesign). As with the Cx itself, the activities associated with training will span from project start to finish. Ideally, training would extend beyond the end of the Occupancy and Operations Phase (defined as roughly one year into building use) via implementation of an Ongoing Commissioning Process (OCx) program.

This guideline is part of a larger collection of Cx documents prepared by ASHRAE and other professional organizations. Driven by the process that is detailed in Guideline 0 and Guideline 0.2, several technical support guidelines provide specifics related to implementation of Cx for various systems and assemblies. Several process support guidelines (such as this one) provide more detail on various aspects of the process itself.

As with Guideline 0, the training requirements in this guideline are structured around a conventional program-design-bid-build project acquisition process. In general, the requirements should also apply to other types of acquisition approaches (such as design-build) with minor adjustments for project information flows and terminologies. Like Guideline 0, this guideline focuses on new construction and major renovations (where the four project phases will be fully evident). However, these training requirements also apply to existing building Cx situations (similar to Guideline 0.2) with some shift in process and terminology.

Although developed primarily in support of ASHRAE Guideline 0 and 0.2, this document provides useful and applicable support for the training aspects of ANSI/ASHRAE/IES Standard 202, The Commissioning Process Requirements for New Buildings and New Systems*, and ANSI/ASHRAE Standard 230,* The Commissioning Process Requirements for Existing Buildings and Systems*.*

1. PURPOSE

The purpose of this guideline is to provide methodologies and formats for developing training plans, conducting training programs, and documenting training results for the operations and maintenance of building systems and assemblies during the Commissioning Process (Cx).

2. SCOPE

2.1 The procedures, methods, and documentation requirements in this guideline cover the development of training plans, assembly and preparation of training materials, and the conducting of training programs for the facility's operations and maintenance (O&M) personnel.

2.2 The guideline addresses the following:

a. Development of training requirements and plans

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b. Verification of personnel training needs and results
c. Training formats and examples of training records
d. Sources and development of training materials
e. Methods of conducting training
f. Evaluation of training programs
g. Recording of training

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