

OVERVIEW

Because pro-AV design and integration occurs within the building design and construction process, these chapters are organized to correspond to this architectural sequence. Highlighted here are important elements such as how pro-AV fits into the process as well as best practices for the AV professional, the architectural and engineering design team, the building construction team and the facility owner. It is a start-to-finish approach with recommended practices and suggestions for handling issues that arise during the project.

The chart below provides an overview of the two primary AV system delivery methods: AV consultant-led design-bid-build and AV integrator-led design-bid build. The processes are shown left to right as a rough timeline in relation to the overall building design and

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There are times when the phases listed here are compressed within a small project; however, large projects generally follow these steps if they involve an architectural firm in the process. These phases in sequence are:

Program Phase

Within the building design and construction process, the term “program” is used to refer to the needs analysis phase. In this phase, the users’ project goals and needs are translated into a textual report of building design criteria, occupancy, use, space program (types and sizes), space adjacencies, project schedule and project budget.

Figure 4. AV Process Overview

Project Process	Contract Building Design Team	Building Program and Budgeting	Schematic Design	Design Development	Construction Documents	Bid & Contract Base Building Construction Team
Consultant-Led Design-Bid-Build	Select AV Consultant RFQ/Shortlist/RFP Contract for Design (see Chapter 3)	Develop AV Program and Budget	Preliminary AV Systems Design	Design Base Building Infrastructure for AV	Review Coordinate AV-Related Base Building Design Elements	
Integrator-Led Design-Build	Select AV Integrator RFQ/Shortlist/RFP Contract for Design (see Chapter 3)	Develop AV Program and Budget	Preliminary AV Systems Design	Design Base Building Infrastructure for AV	Review Coordinate AV-Related Base Building Design Elements	
Owner Duties	Provide Input to AV and Building Program		Review Base Building Design			
	Chapter 4: The Program Phase			Chapter 5: The Design Phase		

Design Phase

The design phase translates program information into drawings and specifications. It is comprised of the following sub-phases:

- Conceptual Design Phase:** Following architectural programming, the architect sometimes creates a conceptual design – a one-line diagram that graphically portrays the program information for space shapes, adjacencies and sizes.
- Schematic Design (SD) Phase:** The conceptual design is developed to a more detailed level, beginning to show more detail such as double lines for walls, door locations and room orientations. In addition, the architect defines the overall “massing” of the building(s), and a schematic narrative generally describes the major systems to be included in the building.
- Design Development (DD) Phase:** The goal of design development is to move beyond major coordination issues to the basic floor plans. During this phase, all major design decisions are made and finalized with the owner so the building floorplan is set, engineering systems selected and detailing can commence. This is an intense period of design consulting and decision making for the design team and the owner. The end result is the final architectural and engineering design.

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construction process with key tasks shown for each phase. Reflecting the owner's crucial role, certain key owner tasks are also shown. The many tasks performed in the AV design and integration process are discussed in detail within each chapter.

Reading vertically, an overview of the construction and related AV tasks can be found by project phase, with the chapter associated with each phase noted at the bottom. Some aspects of the process that may occur in one phase but are described in another chapter are noted in the contrasting boxes.

Base Building Construction				Building Commissioning	Building Occupancy		
	AV Bid		AV System Installation				
Develop AV System Design Package (see Chapter 5)	Select AV Integrator RFQ/Shortlist RFP	Review AV Bids (see Chapter 3)	Contract Integrator	Pre-Test System	Commission the AV System	Train the End-Users	Warranty Period Begins
Review AV-Related Base Building Submittals	Monitor AV-Related Base Building Infrastructure Construction		Review AV Systems Submittals				
Contract Same AV Integrator for AV Installation (see Chapter 3)	Develop AV System Design		Pre-Test System	Commission the AV System	Train the End-Users	Warranty Period Begins	
Review AV-Related Base Building Submittals	Monitor AV-Related Base Building Infrastructure Construction						
Review AV Bids	Provide OFE	Provide Communications Services			Coordinate End-Users and Spaces for Training	Sign-Off	
Review AV Systems Design including Graphical User Interfaces		Review AV Systems Submittals					
Chapter 6: The Construction Phase				Chapter 7: Commissioning and Training			