

# WRITING PROJECT TECHNICAL SPECIFICATIONS

## INTRODUCTION

This course, based on CSI's Manual of Practice recommendations and principles, will enable you to update and increase your fluency in CSI specification writing, production, and application techniques and will teach you how to use these recommendations to prepare project documents in current industry standard formats. This course will introduce the basic principles of CSI construction document organization; identify the relationship and coordination of these documents and to define the CSI standard classification systems for construction information and the formats used to organize project manual data. It will present CSI writing techniques; define CSI's basic concept of General Requirements administrative and procedural specification sections; learn the organization and applications of CSI's standard specification formats and recommendations for methods of specifying construction products and emphasize the principles of accuracy, clarity, correctness and conciseness as requirements for effective communication

## BENEFITS

- Gain knowledge of current industry standard recommendations, principles and techniques of construction specifications writing.
- Develop an understanding of CSI's Classification Systems and Formats concepts.
- Master the principles and techniques for locating and arranging construction information in contract documents.
- Obtain hands-on experience in creating clear, concise and coordinated specifications
- Apply the different methods of specifying and learn basic writing styles.
- Identify resources and computer programs available for specifications preparation

## PRESENTER

**Dr. Jamal F. AlBahar, PMP, AVS**

**Registered Arbitrator Dubai, U.A.E. and Kuwait - Associate Value Specialist, SAVE, USA -**

**Active Member: PMI, CMAA, AACE, AAA, PMA, SAVE, CSI,**

**President, PROMIS- Project Management Engineering Systems**

Dr. AlBahar, is a regional expert in project management applications and a well recognized consultant in construction contracts and claims analysis. Dr. AlBahar is a frequent regional and international speaker on subjects related to project management, construction contracts, tendering procedures, claims analysis/evaluation, arbitration, and value engineering. Dr. AlBahar has conducted over 500 public and in-house training courses in the last 20 years on subjects related to contracts, claims analysis and pricing, project management, value engineering, budgeting and cost estimating, and effective project administrative procedures. Dr. AlBahar is a registered arbitrator in Kuwait, Bahrain and the U.A.E.

## PROGRAM

### DAY ONE - FUNDAMENTALS AND FORMATS

- **PROJECT MANUAL CONCEPT**
  - ❖ Construction Documents, Principles and Contents
  - ❖ Project Manual Arrangement: Bidding, Contracting, and Specifications
  - ❖ Project Life Cycle/Phases
- **CLASSIFICATION SYSTEMS**
  - ❖ Systems and Assemblies - UniFormat
  - ❖ Products and Materials - MasterFormat
  - ❖ Purpose, Structure, & Application of CSI Classification
- **FORMATS**
  - ❖ CSI Standard Formats & Divisions and Sections
  - ❖ Steps for Specifications Writing
  - ❖ Understanding Job Requirements
- **CONSTRUCTION DOCUMENTS**
  - ❖ Bidding Requirements & Contract Documents
  - ❖ Contracts Types, Forms & Conditions
  - ❖ Design and Construction Participants
  - ❖ Design Team Co-ordination

### DAY TWO - SPECIFICATION WRITING

- **MASTER FORMAT AND SECTION FORMAT**
  - ❖ Work & Project Information Locations
  - ❖ Levels of Specifying & Product Information Locations
  - ❖ Order in Specifications: Divisions and Sections
- **METHODS OF SPECIFYING**
  - ❖ Definition of Specifying Methods
  - ❖ Advantages and Limitations of Each Method
- **DRAWINGS**
  - ❖ Role and Function of Drawings in Project Phases
  - ❖ Design Phase Drawings
  - ❖ Drawings during Construction & Categories
  - ❖ Co-ordinating Drawings, B.O.Q. and Specifications
  - ❖ Sample Co-ordination Checklist
- **LANGUAGE AND WRITING STYLE**
  - ❖ Requirements for Effective Communication & Writing Style
  - ❖ Specification Language: Vocabulary, Spelling, Sentence Structure, Abbreviations, Symbols, Numbers, Capitalization, Punctuation, Grammar, etc.
  - ❖ Practical Considerations during Writing
  - ❖ Specification Detail

### DAY THREE - SPECIFICATION APPLICATION

- **PRODUCT EVALUATION AND SELECTION**
  - ❖ Establishing the Requirements & Product Selection

### DAY THREE - SPECIFICATION APPLICATION (contd.....)

- ❖ Determining Project Requirements & Listing Performance Allowance
- ❖ Allowances specification and Alternates
- ❖ Identifying and Evaluating Products
- ❖ Selecting and Documenting Final Product Selection
- **MASTER SPECIFICATIONS**
  - ❖ Advantages of Master Specifications
  - ❖ Contents and Organization of an Office Master
  - ❖ Preparing Master Specification Sections
  - ❖ Using and Updating Master Specifications
  - ❖ Commercial Master Specifications
- **METHODS OF SPECIFYING**
  - ❖ Descriptive & Performance Specifications
  - ❖ Incorporate the Reference Standards Properly
  - ❖ Enforce the Requirements of the Standards & Proprietary Specifications
  - ❖ Closed and Opened Proprietary Specifications
  - ❖ Non-Restrictive Specifications

### DAY FOUR - SPECIFICATION PRODUCTION

- **WRITING SPECIFICATION SECTIONS**
  - ❖ Gathering Information
  - ❖ Drafting the Specification Sections: I.General, II.Products & III. Execution
  - ❖ Selecting Products & Writing Considerations
- **SUBSTITUTIONS**
  - ❖ Substitutions Requirements and Definitions
  - ❖ Substitutions Proposed during Bidding Phase & After
  - ❖ Substitution Procedures Before and After Bidding

### DAY FIVE - PRACTICE EXERCISES

- **WARRANTIES**
  - ❖ Guaranty and Warranty: What is the Difference?
  - ❖ Construction Warranties, Terms and Conditions
  - ❖ Purpose and Benefits of Warranties, Limitations and Exclusions
  - ❖ Remedies & Duration of Warranties & their Procurement
- **PRODUCING A PROJECT MANUAL**
  - ❖ Product Decisions & Preliminary Specifications
  - ❖ Project Type and Document Requirements
  - ❖ Organizing Specifications & Preparation
  - ❖ Editing & Final Preparation
- **SPECIFICATIONS WRITING - Practice Exercises**
  - ❖ Using Software for Construction Specification Writing & Editing
  - ❖ Demonstration of SPECLINK and ARCON Construction Specifications Writing and Development Software