The New MasterFormat™ & Your HVAC Business

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The Construction Specifications Institute (CSI) is a professional organization whose purpose is to promote better organization and communication of construction project information.

*MasterFormat* is a trademark of CSI.

*MasterFormat* is a list of numbers and titles for organizing information about construction requirements, products, and activities into a standard sequence.


*MasterFormat* organizes products and information into 5 groups and 33 major divisions (Level 1 titles).

Sixteen division format was first introduced in 1963 and was expanded to 49 (16 for future use) in the 2004 edition.
Construction Specifications Institute
Standard Specification Groups

- Procurement & Contracting Requirements Group
  - Procurement & Contracting Requirements (Division 00)

- Specifications Group
  - General Requirements Subgroup (Division 01)
  - Facility Construction Subgroup (Divisions 02 - 19)
  - Facility Services Subgroup (Divisions 20 - 29)
  - Site & Infrastructure Subgroup (Divisions 30 - 39)
  - Process Equipment Subgroup (Divisions 40 - 49)
Superseded CSI 1995 MasterFormat™
Former 16 Division Format

- Division 1 General Requirements
- Division 2 Site Construction
- Division 3 Concrete
- Division 4 Masonry
- Division 5 Metals
- Division 6 Wood & Plastics
- Division 7 Thermal & Moisture Protection
- Division 8 Doors & Hardware
- Division 9 Finishes
- Division 10 Specialties
- Division 11 Equipment
- Division 12 Furnishings
- Division 13 Special Construction
- Division 14 Conveying systems
- Division 15 Mechanical
- Division 16 Electrical

Old Divisions 15 & 16 = New Facility Services Subgroup
2004 CSI MasterFormat™ Facility Services Subgroup

Division 21  Fire Suppression
Division 22  Plumbing
Division 23  HVAC
Division 25  Integrated Automation
Division 26  Electrical
Division 27  Communications
Division 28  Electronic Safety & Security

*MasterFormat™ Breakout = Opportunity*
MasterFormat’s organizational structure used in a project manual does not imply how the work is assigned to various design disciplines, trades, or subcontractors. MasterFormat is not intended to determine which particular elements of the project manual are prepared by a particular discipline. Similarly, it is not intended to determine what particular work required by the project manual is the responsibility of a particular trade. A particular discipline or trade is likely to be responsible for subjects from multiple Divisions, as well as from multiple Subgroups.

The Contract Documents consist of this Agreement, Conditions of the Contract (General, Supplementary and other Conditions), Drawings, Specifications, addenda issued prior to execution of this Agreement, other documents listed in this Agreement and Modifications issued after execution of this Agreement; these form the Contract, and are as fully a part of the Contract as if attached to this Agreement or repeated herein.
The Specifications are that portion of the Contract Documents consisting of the written requirements for materials, equipment, construction systems, standards and workmanship for the Work, and performance of related services.
What Are Specifications?

- Specifications are written instructions concerning project requirements.
- Drawings show what is to be built.
- Specifications describe:
  - How the project is to be constructed.
  - What results are to be achieved.
Specifications “Specify” Technical Requirements

- Materials
- Workmanship
- Operating Characteristics
- Other Characteristics
What Makes A Good “Spec”?  

- Project Specific  
- Accurate & Consistent  
- Up To Date  
- Concise Language  
- Coordinated With Drawings
Impact Of “Specs”

- Cost
- Schedule
- Quality
Know “Spec” Requirements

Education is what you get when you read the specs …

Experience is what you get when you don’t …

- Assist owner and designer in the preparation of a complete HVAC bid package.
- Assist HVAC contractor in the preparation of an accurate and competitive bid.
Use OF HVAC BSRM:
Owner & Designer Outcomes

- Ensure complete HVAC bid package.
- More accurate bids.
- Smaller bid spread.
- Increased installation quality.
- More efficient installation.
- Reduced changes & disputes.
- Greater value.
Use OF HVAC BSRM: HVAC Contractor Outcomes

- Identify administrative and technical requirements that could impact the cost of performing the work.
- Identify potential problem areas to avoid.
- Prepare competitive bids that are complete that address all of the contract requirements.
- Reduce contractual and construction risk.
- Improve profitability.
HVAC BSRM Divisions

Division 00  Procurement & Contracting Requirements
Division 01  General Requirements
Division 23  Heating, Ventilating, & Air Conditioning
HVAC BSRM Parts

Part I Administrative Requirements
Part II Technical Requirements
HVAC BSRM – Part I
Administrative Requirements

Section 1  Introduction
Section 2  Project Contractual Requirements
Section 3  Bidding Process & Procedures
Section 4  CSI MasterFormat™ Overview
Section 5  Project Procurement & Contracting (Div 00)
Section 6  Project General Requirements (Div 01)
Section 7  HVAC Suggested Work Categories
Section 8  SMACNA Publication Cross Reference
Section 9  Scope Expansion Opportunities
Annex A  HVAC Work Category Forms
HVAC BSRM – Part II
Technical Requirements

Section 10  HVAC System Requirements (23 00 00)
Section 11  Facility Fuel Systems (23 10 00)
Section 12  HVAC Piping & Pumps (23 20 00)
Section 13  HVAC Air Distribution (23 30 00)
Section 14  HVAC Air Cleaning Devices (23 40 00)
Section 15  Central Heating Equipment (23 50 00)
Section 16  Central Cooling Equipment (23 60 00)
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Section 18  Decentralized HVAC Equipment (23 80 00)
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- CSI MasterFormat™ & Trade Jurisdiction
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- Named Subcontractors
- Bidding Process
- Bid Security
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- Allowances

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- Responsible Bidder
- Responsive Bidder
- Bid Shopping
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- Bid Withdrawal
- Bid Mistakes
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- Why Is Division 00 So Important
- Need To Review Division 00
- Use Of Division 00
- Introductory Information
- Procurement Requirements
- Contracting Requirements
HVAC BSRM – Section 6
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CSI Division 01

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- 01 20 00 Price & Payment Procedures
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- 01 40 00 Quality Requirements
- 01 50 00 Temporary Facilities & Controls
- 01 60 00 Product Requirements
- 01 70 00 Execution & Closeout Requirements
- 01 80 00 Performance requirements
- 01 90 00 Life Cycle Requirements
HVAC BSRM – Section 7

HVAC Suggested Work Categories

- Introduction
- Work Category Matrix
- Customizing The Work Category Matrix
## TABLE 8-1
**SMACNA REFERENCE PUBLICATION & ABBREVIATIONS**

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<th>APP</th>
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<td>Accepted Industry Practice for Industrial Duct Design (Complete Citation)</td>
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## TABLE 8-2
**HVAC GENERAL REQUIREMENTS (23 00 00)**

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- Section 07 72 13 – Manufactured Roof Curbs
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- Section 10 22 00 – Partitions
- Section 10 51 00 – Lockers
- Section 10 82 00 – Grills & Screens
- Section 14 91 00 – Chutes
- Other Scope Expansion Opportunities
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Questions?