

# Using *MasterFormat*

*MasterFormat* supports a wide range of applications, including traditional core applications, and AI-driven integrations across the project lifecycle, thanks to its structured, standardized approach to organizing project information.

## Traditional Applications of *MasterFormat*

### 1. Project Manuals

*MasterFormat* organizes specifications in a project manual into a hierarchical structure: 50 divisions (e.g. Division 03: Concrete, Division 09: Finishes), each with detailed sections and titles, making the documentation in the project manual clear and easy to search.

In the matter of discipline and trade jurisdictions *MasterFormat's* organizational structure does not imply how the work specified in a project manual is to be assigned to various design disciplines, trades, or subcontractors. That work is left to the general contractor or design lead to work out with consultants and trade contractors using scope of work or similar documents. *MasterFormat* is not intended to determine which portions of the project manual are prepared by a design discipline, nor is *MasterFormat's* structure intended to determine which trade performs work described by the project manual. A discipline or trade is likely to be responsible for subjects from multiple Divisions, as well as from multiple Subgroups. Local practice or regulation will also likely affect how work is designed and performed.

Concerning contract documents *MasterFormat's* organizational structure does not determine what is and is not a contract document. Generally, the documents included in the Contracting Requirements will include a definition and a listing of the contract documents for a project.

In Procurement Requirements and Contracting Requirements, some owners may use different terminology to refer to documents with established *MasterFormat* titles. Users should alter the *MasterFormat* titles when appropriate and required by the owner. Similarly, it is not necessary to renumber or retitle printed forms and standard contract documents published by various professional societies or contract-issuing bodies to correspond with numbers and titles in this portion of *MasterFormat*.

It is recommended that the table of contents for a project manual list all the *MasterFormat* Groups and Subgroups, regardless of whether the project manual contains any documents or sections within those Groups or Subgroups. If any Division within a Subgroup is used, then all the Divisions of that Subgroup should be listed, with Division numbers not used in the project labeled as "Not Used".

If none of the Divisions within a Subgroup are used, then the Subgroup can be labeled as "Not Used" without separately listing the Divisions within that Subgroup.

The sections should be listed in their numerical order under the appropriate Divisions. Only those sections used in the project manual should be listed; no indication of sections that are not used needs to be included.

### 2. Electronic Filing

Although *MasterFormat* recommends delimiters when numbers are displayed graphically, this may not be desirable when used in databases or similar software, depending on rules that may be in place for any given field in which information is stored. The key to effectively using *MasterFormat* numbers to organize electronic information is dependent more on consistency of application than strict adherence to delimiter assignment as recommended in this guide. If delimiters or spaces are to be used, always use the same delimiters and spaces

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in the same locations in the number structure.

For example:

11 22 16

11 22 16.13

11 22 16.16

*or*

112216

112216.13

112216.16

*or*

112216

112216\_13

112216\_16

Lower-Level (more detailed) numbers and titles may be used for internal electronic filing purposes. In the case of specifications, a user may have multiple versions of the same specification section for different clients or for different types of projects.

For example, following the rules provided in this guide under Level 4 and 5 numbers, the standard heading 23 61 16 Reciprocating Refrigerant Compressors could be subdivided into alternate specification sections for different types of projects. The multiple versions of the section would then be identified with appropriately assigned Level 4 or 5 numbers for internal reference. When the sections are used in a project manual, they would be presented to other project team members with the standard number and title 23 61 16 Reciprocating Refrigerant Compressors. The lower-level numbers and titles would only be used for the identification and interfiling of the multiple versions of the same section in a firm or organizational library.

### 3. Naming Product Data Files

*MasterFormat* is not intended to provide a technical or product data filing system, as there is often not a single location where a product may be found in *MasterFormat*. Many products are used for multiple purposes or work results and may be found in multiple locations in *MasterFormat*.

This relation between specification sections and products can be useful for providing pointers to products based on their uses, but it can be confusing if used as a primary organizational structure for products.

Names of products may appear in some titles in *MasterFormat* when they are synonymous with the work result, but generally there is a conceptual difference between products and their use in work results. Products which might be included with a work result but are not included in the title are often listed in the Explanations Column for the title, under the heading “Products.”

*OmniClass* Table 23—Products provides a tool for classifying products, with single locations provided for any given product class, regardless of the different types of work results in which the product may be employed.

Suppliers’ and subcontractors’ data, such as qualification information or submittals, may be identified by the work result they supply or install. The work of suppliers and subcontractors often transcends Division boundaries, requiring a system for multiple references to *MasterFormat* titles. A recommended alternative solution is to use other *OmniClass* Tables such as Table 33—Disciplines or Table 32—Services.

#### 4. Cost Data Applications-Cost Estimating, Budgeting, and Financial Tracking

Cost analysis requires the identification of line items, which are often related to products and activities. An identification scheme based on *MasterFormat* can be as flexible as appropriate for any firm or project's needs.

*OmniClass* Table 21—Elements or CSI/CSC *UniFormat* are also recommended when dealing with construction costing applications in the earlier stages of a project, before work results have been specified.

Organizing unit price databases using the same numbering and titling format used for specifying and naming data files benefits the user through increased uniformity and standardization. Familiarity with *MasterFormat* allows users to relate specification requirements, product information, and cost data to a single organizational standard.

Numbers and titles under “Procurement Requirements” and “Contracting Requirements” in Division 00 identify cost items related to bonds, insurance, permits, fees, and other general items that may be more preliminary in nature.

Numbers and titles in Division 01 identify unit costs for temporary construction facilities and controls, mobilization, project site administration, and other general requirement cost items often related to construction phase activities.

Numbers and titles in the other Subgroups of the Specifications Group identify costs related to work results and their construction or installation.

*MasterFormat* helps estimators classify costs based on divisions (e.g., 03 – Concrete, 26 – Electrical).

*MasterFormat* facilitates quantity takeoffs and bid comparisons. Organizing and tabulating cost reports may require indicating or summarizing products and activities. Using *MasterFormat* numbers and titles will aid users in making estimates about material costs while analyzing the report.

#### 5. Organizing Drawing and Model Notations/BIM Integration

An important strategy for the naming of drawing or BIM objects is related to the need to link requirements between complementary documents. One must examine the entire set of contract documents to determine all the requirements for a single product. Notations on drawings should use terminology consistent with those used in the specifications in order to tie the specified work results and activities to their locations and number as identified by the drawing or model.

Reference keynoting applications have adopted *MasterFormat* as a base numbering system, to enhance cross-referencing and coordination between drawings, BIM objects, and specifications.

#### 6. Construction Market Data

Market data reporting agencies routinely use *MasterFormat* to identify products specified in a project manual during the procurement stage. This practice allows users to quickly identify substitution and sales potential for their products and services.

#### 7. Project Management and Scheduling

*MasterFormat* integrates with CPM scheduling tools by associating tasks with *MasterFormat* divisions.

*MasterFormat* streamlines procurement and resource planning.

## 8. Facility Management and Ongoing Operations

Facility managers use *MasterFormat* numbers and titles to identify products incorporated into their buildings, and to identify items that may be referenced in several documents.

The *MasterFormat* titles related to operation and maintenance provide a scheme for specifying predictable maintenance at time of installation, and for recording general life cycle maintenance information.

The numbers and titles can be taken from the original project specifications and other documents or used by facility management staff to organize asset maintenance information after construction and handover e.g. to enable structured handover of data for O&M (Operations and Maintenance) maintenance manuals and help resolve disputes with consistent project documentation.

*MasterFormat* supports lifecycle asset tracking and work orders.

## 9. Project Collaboration

*MasterFormat* helps architects, engineers, contractors, and facility managers communicate using a common language, reducing miscommunication and boosting efficiency.

## 10. Integration with Software Platforms and Digital Tools

*MasterFormat* integrates with specification software platforms that are supported by providers offering editable, pre-written specification sections aligned with *MasterFormat*.