

MASTERFORMAT™

2004 EDITION NUMBERS & TITLES

6/8/2004 (revised August 2004, November 2004)

The numbers and titles presented here are identical to the MasterFormat™ 2004 Edition Numbers and Titles that were distributed on June 8, 2004 and revised in August 2004, save for additional selected title corrections that were made in the process of copy editing the MasterFormat publication. These corrections are listed separately on <http://www.csinet.org/MasterFormat>. The numbers and titles presented here are identical to the numbers and titles presented in the full MasterFormat 2004 publication available for purchase from CSI and CSC.

MasterFormat™ is the specifications-writing standard for most commercial building design and construction projects in North America. It lists titles and section numbers for organizing data about construction requirements, products, and activities. By standardizing such information, MasterFormat facilitates communication among architects, specifiers, contractors and suppliers, which helps them meet building owners' requirements, timelines and budgets.

This revision of MasterFormat is the most significant in the product's 40-year history, and reflects the growing volume and complexity of information generated for commercial construction projects. MasterFormat 2004 Edition: Numbers & Titles was developed by a team of individuals representing all stakeholders in the industry – owners, architects, engineers, contractors, manufacturers and facility managers. MasterFormat is intended to address specification requirements through the entire built lifecycle.

The Numbers and Titles are intentionally structured for anticipated growth and expansion in the future. CSI encourages all interested parties to provide input to CSI so that as the built environment evolves so can MasterFormat.

To learn more about MasterFormat 2004 Edition, go to <http://www.csinet.org/MasterFormat> for education programs, training, certification and local chapter information.



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INTRODUCTION

Over the last forty years, *MasterFormat*™ has become the leading standard for organizing commercial construction specifications, and is now almost omnipresent in the AEC industry, thanks to the many applications to which it has been put. In 2001, the Construction Specifications Institute (CSI), along with sister organization Construction Specifications Canada (CSC), charged the *MasterFormat* Expansion Task Team with examining whether there was a need to revise and possibly expand the 1995 edition of *MasterFormat* to accommodate changes that have taken place in the industry since that version was published. The task team worked to develop a revised and expanded version of *MasterFormat*, consulting with all types of users, creating and distributing drafts, collecting and evaluating commentary, and attempting to bring all of this information into line with a vision of the construction industry that equally addresses the needs of next year and those of forty years from today. The 2004 edition of *MasterFormat* promises to be the most dramatic revision in the document's forty-year history, and one that will position it to excel at organizing construction information for a wider array of project types and currently unforeseen technology for the next forty years and beyond.

MasterFormat 2004 Edition: Numbers and Titles is a master list of numbers and subject titles for organizing information about construction work results, requirements, products, and activities into a standard sequence. Construction projects use many different delivery methods, products, and installation methods. Successful completion of projects requires effective communication among the people involved. Information retrieval is nearly impossible without a standard filing system familiar to each user. *MasterFormat Numbers and Titles* facilitate standard filing and retrieval schemes throughout the construction industry. *MasterFormat Numbers and Titles* are suitable for use in project manuals, for organizing cost data, reference keynotes on drawings, for filing product information and other technical data, for identifying drawing objects and for presenting construction market data.

Each *MasterFormat* number and title defines a "section," arranged in "levels" depending on their breadth of coverage. The broadest collections of related construction products and activities are level one titles, otherwise known as "divisions." Each division in the *MasterFormat 2004 Edition: Numbers and Titles* is made up of level two, level three, and occasionally level four numbers and titles assigned by *MasterFormat*, each of which delineate a gradually more detailed area of work results to be specified. Work results are defined as traditional construction practices that typically result from an application of skills to construction products or resources. A further explanation of how to use each of the individual titles listed in *MasterFormat 2004 Edition: Numbers and Titles* is provided in the complete *MasterFormat 2004 Edition* publication, available from CSI and CSC in late 2004. Along with these scope and usage notes, the complete publication includes other added information designed to make its use easier, including a keyword index of requirements, products, and activities to help users find appropriate numbers and titles for construction subjects and an application guide to advise users of best practices for the use of *MasterFormat* titles and numbers.

MASTERFORMAT 2004 EDITION DEVELOPMENT:

The *MasterFormat* Expansion Task Team started their work in April 2001 by reaching out to the AEC industry and soliciting commentary on the proposal to revise and expand *MasterFormat*. Based on this commentary, the task team embarked on the long process of revising and developing content for the 2004 edition. Throughout its work, the task team's progress from draft to draft was driven by evaluating the commentary given by *MasterFormat*'s users, and integrating that with the central challenge – maintaining a balance between meeting the needs of today and working to help implement a broader vision of an integrated construction information marketplace that will soon be pervasive in the way we conduct our everyday work. The task team explored many possible options for maintaining this balance between the demands of the present and those of the near future, and the need that underlies it, to create

the best and most flexible and forward-thinking expansion, and do so without taking this effort beyond the bounds of user acceptance. For just as it would be senseless to create a 2004 edition of *MasterFormat* that was not flexible or forward-thinking and was thus ill-equipped to meet the challenges and needs that lie ahead, so too would it be pointless to create one that was so forward-thinking that it was unacceptable to today's users and as a result was not implemented. Having incorporated the input of literally hundreds of individuals and organizations into their work, the task team is proud to now present the title and number contents and organization of the next edition of this industry standard, *MasterFormat 2004 Edition: Numbers and Titles*.

MASTERFORMAT 2004 EDITION NUMBERING REVISION EXPLAINED:

One of the most significant changes in the *MasterFormat 2004 Edition* is the adoption of a six-digit numbering system in place of the familiar five-digit system that has been used in *MasterFormat* since the 1978 edition. This six-digit system was first introduced in drafts issued in early 2003, and then accepted by the task team for all subsequent drafts, and provides exponentially more expansion spaces per level than the five-digit system, all but eliminating concerns about future expansion.

The familiar five-digit numbers in *MasterFormat 1995 Edition* are divided in the following fashion:

03 2 0 0 – Concrete Reinforcement

The first two digits, in this case "03" represent the division number, otherwise known as "level one." Each of the next three digits are taken individually, each representing one level of classification, or levels two, three, and four. Typically in *MasterFormat*, level four numbers are not assigned and are left as zero, to provide maximum flexibility for individual users.

The new six-digit *MasterFormat 2004* numbers work in a slightly different fashion:

03 20 00 – Concrete Reinforcing

As was the case with the old numbers, the first two digits, in this case also "03," still represent the division number, otherwise still known as "level one." But here's where the difference comes in. The next *pair* of numbers, in this case "20" represents level two, and the third pair, "00," represents level three. Generally, level four numbers are not defined by the listed *MasterFormat* numbers, but when they are, an additional pair of digits is attached to the end, preceded by a "dot." Level four numbers have only been used at locations in which the amount of detail merits the additional level of classification. Level four numbers appear like this:

03 52 16.13 Lightweight Cellular Insulating Concrete

Additional recommendations for the use of level four and level five will be included in the *MasterFormat 2004 Edition* application guide and throughout the full publication, preserving a level of user modifiable numbers for flexibility. More importantly, because each level of classification is represented by a pair of digits, there is room to address over ten times as many subjects at *each level*, providing flexibility and room for expansion that the five digit numbers could never provide, and providing it where it will have the most impact in addressing future needs for expansion to address new subject matter.

MASTERFORMAT 2004 EDITION DIVISION CONTENTS:

Though changes too numerous to list have been incorporated into the 2004 edition of *MasterFormat*, the following is a summary that compares the contents of the divisions that will compose *MasterFormat 2004 Edition* with *MasterFormat 1995 Edition*:

Division 00 – Procurement and Contracting Requirements: Essentially the same scope as *MasterFormat 1995 Edition*.

Division 01 – General Requirements: Area for performance requirements added to allow for writing performance requirements for elements that overlap work sections (building envelope, structure, etc.). This allows for a mixture of broad performance specifications and prescriptive specifications in a project manual.

Division 02 – Existing Conditions: This division is now limited to “existing conditions,” construction practices that relate to items at the site at the commencement of work – selective demolition, subsurface and other investigation, surveying, site decontamination, and site remediation, among others. All site construction as well as heavy civil and infrastructure subject matter, including utility and pavement work, has been relocated to the Site and Infrastructure Subgroup.

Divisions 03 – Concrete, 04 – Masonry, and 05 – Metals: Essentially the same scope as *MasterFormat 1995 Edition*.

Division 06 – Wood, Plastics, and Composites: Essentially the same scope as *MasterFormat 1995 Edition* with expansion in the areas of plastics and composites.

Division 07 – Thermal and Moisture Protection: Essentially the same as *MasterFormat 1995 Edition*.

Division 08 – Openings: Renamed but with essentially the same scope of as *MasterFormat 1995 Edition* with the addition of some other openings such as louvers and grilles.

Divisions 09 – Finishes and 10 – Specialties: Essentially the same scope as *MasterFormat 1995 Edition*.

Division 11 – Equipment: Equipment related to process engineering has been relocated to the Process Equipment Subgroup and equipment related to infrastructure has been relocated to the Site and Infrastructure Subgroup.

Division 12 – Furnishings: Essentially the same scope as *MasterFormat 1995 Edition*.

Division 13 – Special Construction: Special construction related to process engineering has been relocated to the Process Equipment Subgroup. Security access, building automation, detection and alarm, and fire suppression subjects have been relocated to the Facility Services Subgroup.

Division 14 – Conveying Equipment: Renamed with process related material handling subjects relocated to the Process Equipment Subgroup.

Division 15 – Mechanical: Division 15 has been reserved for future expansion and material has been relocated to Division 22 – Plumbing and Division 23 – Heating, Ventilating, and Air Conditioning in the Facility Services Subgroup.

Division 16 – Electrical: Division 16 has been reserved for future expansion and material has been relocated to Divisions 26 – Electrical and 27 – Communications in the Facility Services Subgroup.

Facility Services Subgroup: This subgroup retains the same basic content as published in Draft 4, but with some new divisions, arranged in a revised order.

21 – Fire Suppression: Fire suppression subjects relocated from Division 13 in *MasterFormat 1995 Edition*.

22 – Plumbing: Plumbing subjects relocated from Division 15 in *MasterFormat 1995 Edition*.

23 – Heating Ventilating and Air Conditioning: HVAC subjects relocated from Division 15 in *MasterFormat 1995 Edition*.

25 – Integrated Automation: Expanded integrated automation subjects relocated from Division 13 in *MasterFormat 1995 Edition*.

26 – Electrical: Electrical and lighting subjects relocated from Division 16 in *MasterFormat 1995 Edition*.

27 – Communications: Expanded communications subjects relocated from Division 16 in *MasterFormat 1995 Edition*.

28 – Electronic Safety and Security: Expanded electronic safety and security subjects relocated from Division 13 in *MasterFormat 1995 Edition*.

Site and Infrastructure Subgroup: This subgroup contains heavy civil and utility subject matter, as well as site construction material moved from Division 2 in *MasterFormat 1995 Edition*.

Division 31 – Earthwork: Site construction subjects, chiefly below-grade, from Division 2 in *MasterFormat 1995 Edition*.

Division 32 – Exterior Improvements: Site construction subjects, chiefly above-grade, from Division 2 in *MasterFormat 1995 Edition*.

Division 33 – Utilities: Expanded utility subjects relocated from Division 2 in *MasterFormat 1995 Edition*.

Division 34 – Transportation: Expanded transportation subjects relocated from various Divisions in *MasterFormat 1995 Edition*.

Division 35 – Waterway and Marine Construction: Expanded waterway and marine subjects relocated from mainly Division 2 in *MasterFormat 1995 Edition*.

Process Equipment Subgroup: Some material in this subgroup is new to *MasterFormat 2004 Edition*, while some has been relocated from Divisions 11, 13, and 14 in *MasterFormat 1995 Edition*.

Division 40 – Process Integration: Process facilities are composed of a variety of subsystems, tied together and integrated by distribution pathways, control, and instrumentation. All of these systems must work together as a whole. This division includes elements used to tie these systems together: piping, heat tracing, insulation, and instrumentation and control systems, and also provides a place to specify commissioning requirements for the subsystems and the facility as a whole.

Division 41 – Material Processing and Handling Equipment: Equipment for processing and conditioning of raw materials; material handling equipment for bulk materials as well as discrete units; manufacturing equipment and machinery, test equipment, and packaging / shipping systems.

Division 42 – Process Heating, Cooling, and Drying Equipment: Equipment for process heating, cooling and drying of materials, liquids, gases and manufactured items and materials.

Division 43 – Process Gas and Liquid Handling, Purification and Storage Equipment: Equipment for handling, purification and storage of process liquids, gases, slurries; includes atmospheric tanks as well as pressure vessels.

Division 44 – Pollution Control Equipment: Equipment for controlling emission of contaminants from manufacturing processes and treatment of air, water, soils and noise contaminants.

Division 45 – Industry-Specific Manufacturing Equipment: A division in which users can specify equipment that is used only within a single industry. All industries currently identified within the North American Industry Classification System (NAICS) are allocated space within the division.

Division 48 – Electrical Power Generation: Plants and equipment for the generation and control of electrical power from fossil fuel, nuclear energy, hydroelectric, wind, solar energy, geothermal energy, electrochemical energy, and fuel cells.

Divisions not named above are explicitly reserved to provide space for future development and expansion. To minimize costs resulting from potential future expansions, it's not recommended that users populate these divisions with their own material.

MASTERFORMAT 2004 EDITION AND OTHER INDUSTRY CLASSIFICATION EFFORTS

The *MasterFormat* Expansion Task Team's work also envisions the expanded content of *MasterFormat* serving to inform Table 22 (Work Results) of the *OmniClass* Construction Classification System (OCCS), a multi-table system for organizing information used by the AEC industry. CSI has worked with the cross-industry group responsible for the creation and maintenance of this standard, the OCCS Development Committee, to ensure that *MasterFormat* is compatible with *OmniClass*. As a result, the full version of *MasterFormat* will be one of the first applications of the OCCS. Once fully developed, the OCCS will be the basis for deriving relational applications, and will support and empower the transfer and use of information in the construction marketplace, ultimately serving all participants who work to sustain the built environment throughout the entire life cycle. *MasterFormat's* 2004 edition will play an important role in this activity.

The 2004 edition of *MasterFormat* replaces the 1995 edition and is produced jointly by The Construction Specifications Institute (CSI); (800) 689-2900, and Construction Specifications Canada (CSC); (416)777-2198. For those interested in more information about *MasterFormat* and its use in the construction industry contact CSI Member Service at (800) 689-2900 or consult the web at www.CSNet.org/MasterFormat.

Division Numbers and Titles

PROCUREMENT AND CONTRACTING REQUIREMENTS GROUP

Division 00 Procurement and Contracting Requirements

SPECIFICATIONS GROUP

GENERAL REQUIREMENTS SUBGROUP

Division 01 General Requirements

FACILITY CONSTRUCTION SUBGROUP

Division 02 Existing Conditions

Division 03 Concrete

Division 04 Masonry

Division 05 Metals

Division 06 Wood, Plastics, and
Composites

Division 07 Thermal and Moisture
Protection

Division 08 Openings

Division 09 Finishes

Division 10 Specialties

Division 11 Equipment

Division 12 Furnishings

Division 13 Special Construction

Division 14 Conveying Equipment

Division 15 *Reserved*

Division 16 *Reserved*

Division 17 *Reserved*

Division 18 *Reserved*

Division 19 *Reserved*

FACILITY SERVICES SUBGROUP

Division 20 *Reserved*

Division 21 Fire Suppression

Division 22 Plumbing

Division 23 Heating, Ventilating, and
Air Conditioning

Division 24 *Reserved*

Division 25 Integrated Automation

Division 26 Electrical

Division 27 Communications

Division 28 Electronic Safety and
Security

Division 29 *Reserved*

SITE AND INFRASTRUCTURE SUBGROUP

Division 30 *Reserved*

Division 31 Earthwork

Division 32 Exterior Improvements

Division 33 Utilities

Division 34 Transportation

Division 35 Waterway and Marine
Construction

Division 36 *Reserved*

Division 37 *Reserved*

Division 38 *Reserved*

Division 39 *Reserved*

PROCESS EQUIPMENT SUBGROUP

Division 40 Process Integration

Division 41 Material Processing and
Handling Equipment

Division 42 Process Heating,
Cooling, and Drying
Equipment

Division 43 Process Gas and Liquid
Handling, Purification,
and Storage Equipment

Division 44 Pollution Control
Equipment

Division 45 Industry-Specific
Manufacturing
Equipment

Division 46 *Reserved*

Division 47 *Reserved*

Division 48 Electrical Power
Generation

Division 49 *Reserved*