

UNIVERSITY OF COLORADO BOULDER

# BuRNS

Building Room Numbering System

FACILITIES MANAGEMENT—PLANNING, DESIGN AND CONSTRUCTION

system developed and implemented jointly by:

**CASP (Capital Assets and Space Planning) office**

and

**CAD/GIS office**

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## PURPOSE OF THE ROOM NUMBERING SYSTEM

The numbering of buildings and rooms is an important part of the University's built environment allowing student, faculty, staff and visitors to effectively and safely find their way from place to place. The room numbering system helps in navigation through our large and complex collection of buildings by creating a recognizably related series of identifiers applied universally throughout the campus.

## GOALS OF THE ROOM NUMBERING SYSTEM

### STANDARDIZATION, FLEXIBILITY, AND TIMELINESS

The Room numbering system has been purposefully designed with three points in mind: Standardization, Flexibility and Timeliness.

#### STANDARDIZATION

A primary goal of the room numbering system is developing a means by which the “user” (student, faculty, staff or visitor) of the system will be able to find his or her way through buildings on campus, using principles they will have already learned navigating other buildings on campus. This standardization, through numbering guidelines, will also help the “numberer” choose appropriate numbers when initially numbering spaces or renumbering spaces.

#### FLEXIBILITY

Contrary to popular belief, buildings on campus are not actually static. The schools, departments and centers occupying most buildings will change from time to time, requiring reconfiguration of spaces and their associated room numbers. The numbering system must be flexible enough to accommodate these year by year changes.

#### TIMELINESS

The system must be clear and efficient enough to apply in a relatively rapid manner. Numbering of small projects such as room remodels, door and partition wall changes should occur within a period of days during the CAD office document review process. Larger projects, such as new buildings and capital renewal projects should be accomplished within a period of a couple of weeks during the initial design phase of the project. Reissued drawing sets should be able to be checked against room number assignments which were previously issued during the CAD office document review process.

## THE CAMPUS ELEMENT

### THE 9 CAMPUS ZONES

The Boulder Campus divides itself into seven geographically unique zones or areas. Creating new zones is sometimes necessary with new building acquisitions or construction.

#### LIST OF CAMPUS ZONES AND IMAGE:

1. East Campus
2. East Campus North
3. Grandview
4. Main Campus
5. Mountain Research Station (not shown)
6. North of Boulder Creek
7. Off Campus (not shown)
8. South Campus (not shown)
9. Williams Village



A Campus Zone defines the official building number, allowing building proximity identification from the number only (although some zones have common numbering schemes). A building number is permanent and does not change, even if the official name or code changes.

#### LIST OF CAMPUS ZONE NUMBERING:

1. East Campus (49 buildings)-500s, e.g.: 564, 568
2. East Campus North (2 buildings)-500s, e.g.: 583, 585
3. Grandview (24 buildings)-200s, e.g.: 288, 290
4. Main Campus (112 buildings)-200s, 300s & 400s, e.g.: 205, 378, 403
5. Mountain Research Station (59 buildings)-000s, e.g.: 030, 035
6. North of Boulder Creek (66 buildings)-100s, e.g.: 150, 170
7. Off Campus (3 buildings)-000s, 500s, e.g.: 097, 595
8. South Campus (1 building)-700s, e.g.: 725
9. Williams Village (8 buildings)-600s, e.g.: 630A, 630B

Worth noting, most housing is located in zones other than main campus where academic and research buildings are concentrated.

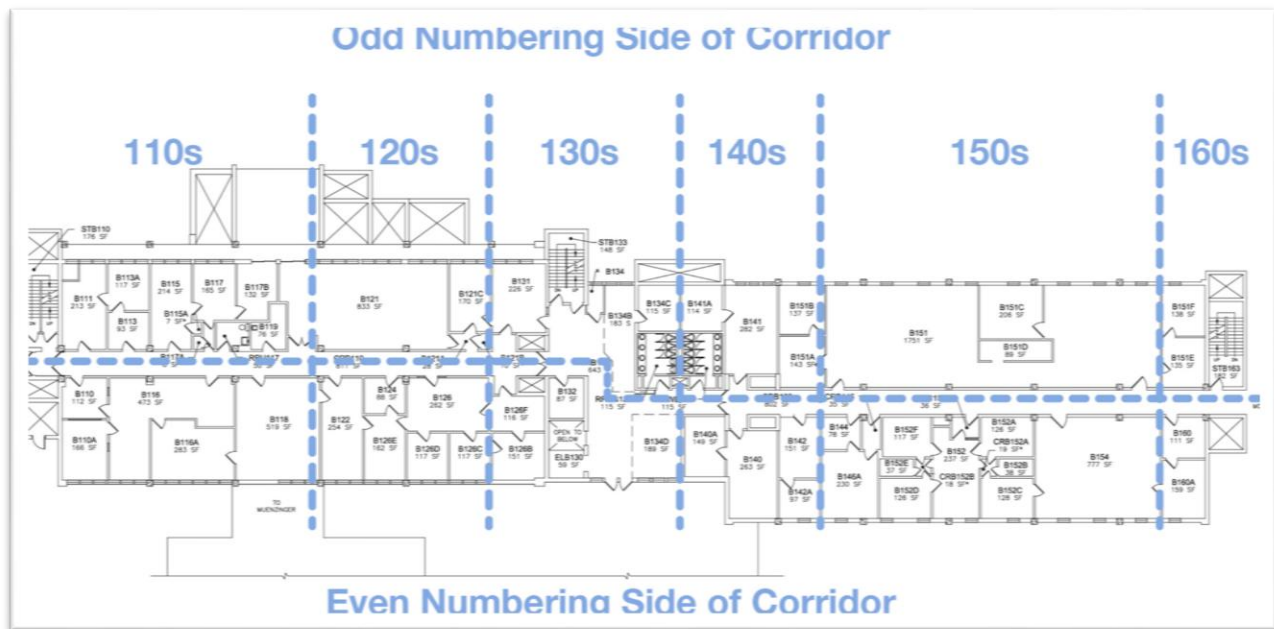
## THE ROOM NUMBERING ELEMENT

### THE TOP ROOM NUMBERING COMPONENTS

*Things to consider before you sit down to number:*

1. Floor identification
2. General floor configuration
3. Potential traffic flow paths
4. Main entrance/exits points
5. Any unique features

*Reference image of a typical floor plan:*



*This first floor level plan represents a typical building with one central corridor bisecting the two halves of the layout. Refer to this image throughout the discussion on room numbering.*

## ROOM NUMBERING SYSTEM ELEMENTS:

1. Floor designation
2. Circulation areas
3. Restrooms
4. Rooms within rooms
5. Suites of spaces
6. Flexibility for future expansion/infill
7. Allowance for building wing identification
8. Special identifiers

Now let's take these one at a time as relating to the Boulder Campus.

### 1. Floor Designation

Every room is identifiable by its beginning number—for example, all rooms beginning with 1XX locate on the first floor; 2XX rooms locate on the second floor and so on. This holds true for all floors above grade (first floor and above). Below grade floors (first basement and below) identify with a prefix of 1B, 2B and so on. Mezzanines are similar.

Floor Name	Floor Code	Room Prefix	Room Examples	Above Grade?	Below Grade
First	1F	1-	133 155A	✓	-
Second	2F	2-	233 255A	✓	-
Third	3F	3-	333 355B	✓	-
First Basement	1B	1B-	1B33 1B55A	-	✓
Second Basement	2B	2B-	2B33 2B55A	-	✓
First Mezzanine	1M	1M-	1M33 1M55A	✓	-

Also note, the Boulder Campus makes use of a *three-digit room numbering convention*, e.g.: XXX. This numbering strategy applies equally well to four-digit environment (XXXX).

## 2. Circulation Areas

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Circulation areas include corridors, stairwells, elevators and internal loading docks. These areas have associated prefixes for room number as well.

CIRCULATION AREA	ROOM PREFIX	EXAMPLES
Corridor (and loading docks)	CR-	<a href="#">CR133</a> , <a href="#">CR155A</a>
Stairwell	ST-	<a href="#">5T233</a> , <a href="#">ST255A</a>
Elevator	EL-	<a href="#">ELIB33</a> , <a href="#">ELIB55A</a>

Adding a circulation prefix (or any other prefix, see below) to another prefix (such as the floor designation) is common, and as it turns out, necessary. The strategy is this:

***FLOOR DESIGNATION PREFIXES ARE SUBORDINATE TO ALL OTHERS.***

The prefix formula structure is "**primary prefix + subordinate prefix + room#.**"

Examples:

"**CR + IB + 100**"

"**ST + 1M + 125A**"

"**EL + 300**"

"**RRU + 2B + 225**"

## 3. Restrooms

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The room numbering system identifies four different types of restroom configurations. There is a unique prefix identifier for each of the men's, women's and unisex rooms. Restrooms for Housing Dorms may simply use the "RR" prefix since the occupant gender for the the floor/wing may change semester by semester.

RESTROOM TYPE	RESTROOM PREFIX	ROOM EXAMPLES
MEN'S	RRM-	<a href="#">RRM133</a> , <a href="#">RRM155A</a>
WOMEN'S	RRW-	<a href="#">RRW233</a> , <a href="#">RRW255A</a>
UNISEX	RRU-	<a href="#">RRU1B33</a> , <a href="#">RRU1B55A</a>
UNDEFINED (OR SHARED RESTROOM IN HOUSING DORMS)	RR-	<a href="#">RR333</a> , <a href="#">RR444</a>



#### 4. ROOMS WITHIN ROOMS

A typical example is an outer office service type of area with a faculty office **accessible through it**. These spaces are identified with an appropriate suffix, e.g.: 110 (outer space) and 110A (inner space); 464, 464A and 464B (triple scenario).

#### 5. Suites of Spaces

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Suites of rooms or spaces are treated in a similar fashion to number four above. A central or core number is chosen, usually the entry space, and each room sequencing with a suffix consecutively. For example, a single outer waiting room and five non-connecting rooms **accessed only through the first outer space**: 2B30 (waiting room), 2B30A, 2B30B, 2B30C, 2B30D & 2B30E. Picture a ~~ferris~~Ferris wheel with our waiting room as the hub and the non-connecting rooms as satellites.

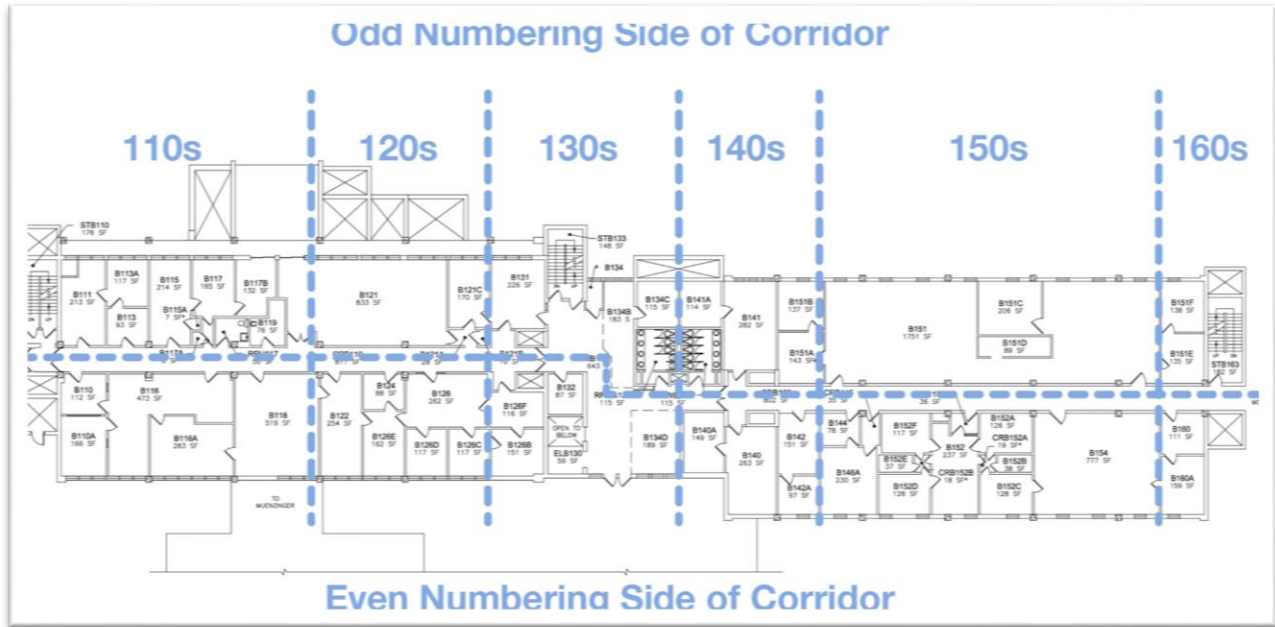
*Note: certain letters should not be included in suffixes to avoid confusion with numerals. These are: I, O, and Q. No one wants to see 110 and 110I, 110O or 110Q!*

#### 6. Flexibility for Future Expansion/Infill

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Not all buildings or renovations utilize all available space initially. Some space is left as shell area for later infill. Subdividing large areas is common. Allowance for these and other scenarios is crucial for avoiding mismatched types of sequencing in the future.

Imagine walking down a hallway with number such as 110, 111, 112, etc. A project to subdivide several of the larger labs into separate office space (no connectivity so suffixes won't work here) comes on line. How to number? Where's the allowance for additional numbering within the existing layout? Creating room number 'gaps' in the sequencing allows for these new numbers. Review the following image:



By breaking a floor into *chunks* of numbers, future expansion can occur without creating chaotic numbering of the new space. These blocks or chunks are just that—an area devoted to 00s numbers, 10s numbers, 20s numbers and so on, e.g.: 100s block (101, 103, 105), 110s block (111, 113, 115), 120s block (121, 123, 125) and so on. With the exception of very high density configurations (say, an entire area of small, hard walled offices) not every number is allocated in a block, anticipating future surge space numbering. This is good planning. Practice this often.

## 7. Allowance for Building Wing Identification

Sometimes in large building, and particularly with additions to existing buildings, wing identification comes into play. This is especially true when room number duplication is unavoidable.

Wing identification in room number is always marked with a prefix, with the most common system matching north, south, east and west. For example:

WING TYPE	ROOM PREFIX	ROOM EXAMPLES
North	N-	<b>N133, N155A, CRN130, RRMN125</b>
West	W-	<b>W233, W255A, CRW250, RRWW225</b>
Addition	A-	<b>A1B33, A1B55A, CRA1B50, RRAUA1B25</b>

The formula adds the wing prefix *before* the floor level designation. Review sections 2 and 3 above. The formula becomes:

"primary prefix + **wing prefix** + subordinate (floor) prefix + room#"

Examples:

"CR + **N** + 1B + 100"

"ST + **W** + 1M + 125A"

"EL + **S** + 300"

"RRU + **A** + 2B + 225"

Note: some room numbering strings can become much longer than traditional legacy methods, but the information conveyed in the room number tag is extremely relevant.

This is now the trend as it ties well into modern room signage requirements.

## 8. Special Identifiers

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In previous examples, prefixes have been used to add information based on location, and type of use. These are the only prefixes currently in use within the University Building Room Numbering system. In future numbering efforts, additional prefixes may be used in order to help locate and identify rooms.