COLORADO MOUNTAIN COLLEGE
DILLON ADDITION
Project #60815
Dillon, Colorado
September 2009
December 2009 (REVISED)

This study was performed using the 2006 International Building Code (IBC). The following areas have been compiled in square feet for code purposes only per the IBC definition and should be recalculated for all other purposes. CMC Renovation plans dated 2/02 were used for reference.

A. BUILDING AREA:

Basement Floor Level	±5,200 s.f. (existing)
First Floor Level	±5,200 s.f. (existing)
Classroom Addition	776 s.f. (new)
Second Floor Level	±4,000 s.f. (existing)
	Total = ±15,176 s.f.

B. OCCUPANCY GROUP (Chapter 3):

Classroom — B (Business – Educational Occupancy above 12th grade)

C. OCCUPANT LOAD (Table 1004.1.1):

Basement Floor Level	
Classrooms	±2,619 s.f./100 load factor = 26
Offices	±339 s.f./100 load factor = 3
Mech/Storage	±555 s.f./300 load factor = 2
First Floor Level	
Classrooms	±1,040 s.f./100 load factor = 10
Classroom Addition	619 s.f./100 load factor = 6
Offices	±2,175 s.f./100 load factor = 22
Mech/Storage	±261 s.f./300 load factor = 1
Second Floor Level	
Classrooms	±2,567 s.f./100 load factor = 26
Mech/Storage	±91 s.f./300 load factor = 1
	Total = 97 occupants

D. TYPE OF CONSTRUCTION (Table 601 and 602): Classified as Type "V-A"

E. ALLOWABLE FLOOR AREA (Table 503):

	ALLOWED	PROPOSED
B Occupancy, Type "V-A"	18,000 s.f.	14,400 s.f. (existing) 776 s.f. (new)

F. ALLOWABLE BUILDING HEIGHT (Table 503):

	ALLOWED	PROPOSED
B Occupancy, Type "V-A"	4 Story/70' Height	2 Story/±30' Height (existing) 1 Story/±16' Height (new)

Note: Allowable height increase due to automatic sprinkler system (504.2).

G. FIRE RESISTANCE RATING REQUIREMENTS FOR BUILDING ELEMENTS (Table 601):

Type "V-A" Construction (New Classroom Addition)	Structural Frame	1 hour
	Exterior Bearing Walls	1 hour
	Interior Bearing Walls	1 hour
	Interior Nonbearing Walls/Partitions	0 hour
	Floor Construction	1 hour
	Roof Construction	1 hour

Note: Structural Frame and Roof Construction are existing to remain. They consist of steel columns, steel beams, steel open web bar joists and metal roof decking.

H. FIRE RESISTANCE RATING REQUIREMENTS FOR EXTERIOR WALLS (Table 602):

B Occupancy; Type "V-A" Construction (New Classroom Addition)	<5'	1 hour
	≥5' <10'	1 hour
	≥10' <30'	1 hour
	≥30'	0 hour

Note: Maximum area of exterior openings closest to property line occurs at west wall (±15% area; ±8' distance). Openings in all exterior walls allowed to be unprotected per Section 704.8.1 and Section 704.8.2.

I. MISCELLANEOUS:

1. Existing Conditions: Bank use was the original design/intent for the existing building before it was renovated to classroom use for CMC. It's noted that the New Classroom Addition occurs under and within the footprint of the existing canopy roof that served as the bank's drive up facility. It's intended to maintain the existing roof structure with modifications as required and noted for this new use.
2. Relationship: The New Classroom Addition is physically connected to but it's access/use can be independent of the existing building.
3. Fire Protection: An automatic sprinkler system and monitored fire alarm system already exists for the building and is to be modified as required to incorporate the New Classroom Addition for the local fire department review and approval (see fire sprinkler plans by others).
4. Energy Code: This project is to meet minimum requirements of the 2006 IECC for climate zone 7.
5. Handicap Accessibility: Required for the New Classroom Addition.

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