

PERMIT: [SPRRN240894](#)

Project Address: 1900 Bridge Ln, Unit 7

Project Name: Saltbox Unit 7 Interior Remodel

Jurisdiction: City of Steamboat Springs, Colorado

PROJECT DESCRIPTION

This project consists of an interior remodel within an existing live-work unit at 1900 Bridge Lane Unit 7. The scope of work includes the conversion of a portion of the existing storage area (Group S-1) into office space (Group B) and the expansion of the existing residential dwelling unit (Group R-2) by constructing a new second-floor sleeping area above the office space.

No changes are proposed to the building footprint, exterior walls, or overall building height. The project is fully contained within the existing unit boundaries.

CODES AND STANDARDS

The project is designed in accordance with the following codes:

- 2021 International Building Code (IBC)
 - 2021 International Existing Building Code (IEBC)
 - 2021 International Energy Conservation Code (IECC)
 - 2023 National Electrical Code (NEC)
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WORK CLASSIFICATION

The scope of work is classified as a **Level 2 Alteration** in accordance with the 2021 IEBC. The work includes reconfiguration of space, addition of new floor area within the unit, and modification of interior partitions without altering the building envelope.

CONSTRUCTION TYPE

- **Type of Construction:** Type V-B

OCCUPANCY

- **Existing Occupancy:** Mixed-use (Group S-1, B, and R-2)
- **Proposed Occupancy:** Mixed-use (Group B and R-2)

The project includes:

- Conversion of existing storage (S-1) to office (B)
 - Expansion of existing residential dwelling (R-2)
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MIXED OCCUPANCY APPROACH

The building utilizes **separated occupancies** in accordance with IBC Section 508.4.

A required fire-resistance-rated separation is provided between the S-1 and Group R-2, Group B (office) and Group R-2 (residential) occupancies

FIRE-RESISTANCE-RATED CONSTRUCTION

Horizontal Assembly

A **1-hour fire-resistance-rated floor-ceiling assembly** is provided between the Group B occupancy below and the Group R-2 occupancy above.

The assembly is designed in accordance with:

- **ICC-ES ESR-1336, Figure 2 (1-hour assembly)** for Boise Cascade BCI wood I-joists

Assembly components include:

- 9-1/2-inch BCI wood I-joists @ 16 inches on center
- 23/32-inch wood structural panel subfloor
- Full-depth batt insulation within joist cavity
- Two (2) layers of 5/8-inch Type X gypsum wallboard at the underside of joists

All materials and installation methods will comply with ESR-1336 requirements, including fastening schedules, joint staggering, and edge support.

Wall Assemblies

Fire-resistance-rated walls are provided as required and are constructed in accordance with:

- **UL Design U305**

Wall assembly includes:

- Wood studs (2x4 or 2x6) @ 16 inches on center
- One layer of 5/8-inch Type X gypsum wallboard on each side

FIRE PROTECTION SYSTEMS

The building is equipped with an automatic fire sprinkler system and fire alarm system.

- Fire sprinkler modifications associated with this project will be submitted under a **separate permit**.

MEANS OF EGRESS

The means of egress system complies with IBC Chapter 10. Occupant load is based on the intended use of spaces in accordance with IBC Table 1004.5.

Existing stairs and primary exit pathways remain unchanged.

INTERIOR ENVIRONMENT

All habitable and occupiable spaces comply with minimum ceiling height requirements per IBC Section 1208.2.

- Minimum ceiling height provided: **7 feet 6 inches**
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SMOKE ALARMS

Smoke alarms are provided in accordance with IBC Section 907.2.11:

- Within each sleeping room
 - Outside each sleeping area
 - On each level of the dwelling unit
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PENETRATIONS AND FIRESTOPPING

All penetrations and joints within fire-resistance-rated assemblies will be protected with approved fire-resistive systems in accordance with IBC Section 714.

SUMMARY

This project maintains compliance with the 2021 IBC and IEBC by:

- Utilizing a separated occupancy approach
- Providing a compliant 1-hour horizontal assembly between occupancies
- Maintaining existing building envelope and structural system
- Coordinating fire protection systems and life safety features

The design intent is to create functional office space below and residential sleeping space above while maintaining required fire-resistance separation and overall building safety.