



University of Colorado
Preconstruction / Post Construction Commissioning
Check out for Andover Controls

Due to the rapid growth and complexity of the University's Andover DDC Control System, this procedure must be followed and adhered to in order to ensure all additions and alterations are documented and accounted for.

Failure to complete the following forms will result in denial of connectivity to the campus Andover network and in violation of UCB Standards 15950 Section 3.04, Detail A.02 and Detail A.03.

University of Colorado Preconstruction Checklist for Andover Controls Commissioning

Date of Request _____

Project Manager: _____
Work Order #: _____
Building Location: _____
Contractor: _____

Are new controllers being added? Yes No
If Yes, how many? _____
Will an Infilink / Repeater be required? Yes No
If Yes, Where and or how many? _____
Is there an existing controller being modified? Yes No
If Yes, Existing controller Name: _____
Controller Serial Number: _____
Points to be added or removed: _____
Programs Modified: _____
Other: _____ <i>Example: Addition of expansion module, point rearrangement, etc.</i>

Reviewed and Approved By:

Andover Technician 1: _____ **Date:** _____

Andover Technician 2: _____ **Date:** _____

Shop Supervisor: _____ **Date:** _____

University of Colorado Post Commissioning Check Out For Andover Controls Commissioning

Project Manager: _____
Work Order #: _____
Building Location: _____
Contractor: _____

Commissioning: Complete Incomplete
If complete- Signature of Commissioning Agent: _____ Date: _____
Panel layouts in enclosure: Yes <input type="checkbox"/> No <input type="checkbox"/>
If Yes- Signature of Verifying UCB Staff : _____ Date: _____
Submittals: Handed Over to UCB Staff or Still in Possession
If Submittals Are Handed Over to UCB Staff- Signature of Recipient of Submittals: _____ Date: _____
Alarms Created and Implemented: Yes No

Final Approval of Completed Job

Andover Technician 1: _____ **Date:** _____

Andover Technician 2: _____ **Date:** _____

Shop Supervisor: _____ **Date:** _____



University of Colorado Preconstruction Fire Rating Checklist

The attached checklist is to be used to determine the fire rating of assemblies in buildings. The checklist is to be distributed to all contractors as they arrive on the job site (the first day). If it is determined that an assembly is fire rated, (based on the checklist) all penetrations are to be protected in accordance with applicable building codes, summary shown on the back of the checklist. Due to past confusion in relation to fire rated assemblies and the protection requirements, all affected contractors (e.g. control, telecom, etc.) must fill out the checklist and submit it to the campus project manager to determine the fire rating of the assembly/assemblies to be worked on and to document the determination. From there the bulleted steps below are to be followed for documentation.

Documentation Process:

- The preconstruction fire rating checklist is to be filled out by the affected contractor and forwarded to the project manager.
- Project manager to send the preconstruction documentation to FLS.
- FLS will review preconstruction documentation, make changes/comments and send back to the project manager to finalize.
- The finalized preconstruction fire rating checklist is to be sent to the contractor for implementation.
- Project manager is to ensure that inspections are called-in at the appropriate stages in the work.

At times, contractors and campus personnel inadvertently compromise the integrity of fire rated assemblies such as floors and walls by penetrating such assemblies without providing firestopping using a UL listed system at the penetration. Examples include control wiring and tubing and telecom wiring. This document provides technical/code information to address this issue. These issues arise in stand-alone small projects managed by Planning, Design & Construction (PD&C), projects managed by outside entities such as Telecom and projects

Preconstruction Checklist to Determine the Fire Rating of an Assembly

By: the Fire- and Life-Safety Group (FLS)
December 2010

The following is a checklist to determine the fire rating of a wall before any penetration is made through the wall. Please fill in any blanks below to determine the fire-rating and to ensure that any penetration is correctly protected. The back side of this sheet contains applicable code sections to help answer questions and fill in blanks.

YES NO

1. Is there a fire rated door on the wall? (A fire rated door will usually have a label on the end of the door showing the fire-rating or a sticker near the door handles stating "BY ORDER OF THE FIRE MARSHAL THIS DOOR MUST REMAIN SHUT AT ALL TIMES". The door may be on a magnetic holder. Normally, a magnetic holder is installed on a fire door.
2. Is there a fire rating on any doors along the assembly? (The rating is located on the hinge side of the door jam and the rating of the assembly is usually more than the door rating) Door rating is _____ minutes. *
3. Are there any fire/smoke dampers present along the assembly? *
4. Are there walls that extend to the structure or ceiling with sheet rock on both sides? *
5. For all new buildings refer to the Construction Drawings for the location and type of fire-rated assemblies. Is the building a new building and have the Construction Drawings been checked?
6. Are any penetrations to be made through or into exit stairs or shaft enclosures? (No penetrations are allowed through an exit stair enclosure or an exit passageway unless approval in writing by FLS)
7. Are any penetrations to be made through exit passageways? (No penetrations are allowed through an exit passageway)
8. Have you determined the boundaries of exit stair enclosures and exit passageway enclosures? (Contact FLS for assistance if needed)
9. Are all penetrations proposed through fire walls, barriers and partitions protected according to IBC 712.3.1.1 and 712.3.1.2? (See code requirements on back)
10. Has the UL System firestopping proposed by the contractor or the design team been reviewed and approved by FLS? (This must occur before any penetration is made)
11. Has a visual inspection of the firestopping been completed by the contractor before calling for an inspection by CU?
12. Has the firestopping been verified as consistent with the submitted UL "System"? (This must occur before any penetration is made)
13. Has evidence, e.g. empty/used container, been gathered to ensure that the proper material, per UL listed system has been used? (This must occur before any penetration is made)
14. The fire rating of the assembly to be penetrated is _____ Hours.
15. If needed please contact FLS for technical assistance.

Note: "Yes" to any of the items marked with an asterisk (*) indicates that the assembly is fire rated.

Summary of Applicable Code Requirements for Fire-Rated Assemblies

By: the Fire- and Life-Safety Group (FLS)
December 2010

Required fire ratings per the 2006 edition of the *International Building Code* (IBC):

Assembly or Barrier	Required Rating	2006 IBC Reference
– Fire Wall separating one building from another	3 Hour	Table 705.4
– Fire Barrier in a building assembly (Egress Routes, Stairwells)	2 Hour	Table 706.3.9
– Exit Enclosure – Three story building or less	1 Hour	Section 1020.1
– Exit Enclosure – Four story building or more	2 Hour	Section 1020.1
– No penetrations are permitted in stairwell enclosures and exit passageways unless specifically approved in writing by Campus FLS		
– Shaft Enclosure – Penetrations will only be allowed by items necessary for the purpose of the shaft	2 Hour	Section 707.8.1
– Fire Partitions in a building assembly (Incidental Use)	1 Hour	Section 708.3
– Telephone Room to Corridor – Building Fully Sprinkled	Smoke Seal	Table 1017.1
– Telephone Room to Corridor – Non-sprinkled	1 Hour	Table 1017.1
– Corridor to Office – Building Fully Sprinkled	Smoke Seal	Table 1017.1
– Corridor to Office – Non-sprinkled	1 Hour	Table 1017.1
– Corridor to Dorm – Building Fully Sprinkled	30 Minute	Section 708.3
– Corridor to Dorm – Non-sprinkled	1 Hour	Section 708.3
– Sleeping Unit to Sleeping Unit – Building Fully Sprinkled	30 Minute	Section 708.3
– Sleeping Unit to Sleeping Unit – Non-sprinkled	1 Hour	Section 708.3
– Assemblies not listed above	Contact FLS 303-492-4042	Contact FLS 303-492-4042

Notes:

1. Section 712.3.1.1 of the IBC states that penetrations are to be installed as tested in an approved fire-resistance-rated assembly.
2. Section 712.3.1.2 of the IBC states that through penetrations are to be protected by and approved penetration fire stop system installed and tested in accordance with ASTM E 814 or UL 1479. The firestop system is to be based on a UL-listed system with a fire rating of not less than the required fire-resistance rating of the barrier penetrated.