Beth Israel Deaconess Medical Center BIDMC Manual

Title: Above Ceiling Permit and Inspection Program

Policy #: EOC-38

Purpose: The purpose of this policy is to maintain the integrity of smoke and fire barrier walls, and above ceiling utility infrastructure to ensure safety and reliability.

Scope: The policy applies to East and West Campuses at Beth Israel Deaconess Medical Center Boston. All persons requiring access above the finished ceiling space to perform work will be required to follow this policy.

Policy Statement:

Definitions

<u>Fire Barrier</u> – Fire barriers are interior walls that extend from the floor to the deck above, including concealed and interstitial spaces. Fire barriers restrict the initial flow of heat within the area of origin, which provides building occupants adequate time to evacuate to safe areas. These walls will typically have a 2 to 3-hour fire-resistance rating and be free of any unsealed penetrations.

<u>Smoke Barrier</u> - A continuous membrane, either vertical or horizontal, such as a wall, floor, or ceiling assembly that is designed and constructed to restrict the movement of smoke and is required to have a 1 hour fire-resistance rating in Massachusetts and be free of any unsealed penetrations.

<u>Life Safety Drawings</u> - Architectural Plans that indicate the location of the fire and smoke barriers, as well as detailing the fire and smoke barriers' fire-resistance ratings. Life Safety Drawings are not the same as Construction Drawings. All drawings are catalogued and maintained by the Facilities Planning, Design and Construction Department.

<u>Above the Ceiling Work</u> – Above the ceiling work is defined as any task that requires access above the finished surface of the ceiling. If a project does not include renovations to the ceiling, an above ceiling permit is not required, unless access is required above the ceiling to complete the project.

I <u>RESPONSIBILITY</u>:

A. Facilities Planning Design and Construction (FPD&C)

- 1. Conducts initial above ceiling work inspections.
- 2. Arranges for existing deficiencies to be corrected prior to the commencement of work/project in Occupied Spaces.
- 3. Issues and tracks Above Ceiling Permits.
- 4. Issues final approval.

B. BIDMC Project Managers/Maintenance Managers Working Above Ceilings

- Responsible for performing or supervising the performance of construction, demolition, installation, modernization, or renovation work that requires work above the ceiling. The Life Safety Technician (LST) shall issue the Above Ceiling Permit (EOC-86) for Above the Ceiling Work. This will include a marked up architectural plan of the area(s) affected indicating the location of all major planned penetrations of walls or assemblies serving as fire or smoke barriers.
- 2. Arranges for existing deficiencies to be corrected. Works with LST to create a plan to correct deficiencies.
- 3. Notifies Facilities Planning Design and Construction when work is completed.

C. Contractors

- 1. Performing all above ceiling work in accordance with applicable industry and life safety codes, standards, and guidelines.
- 2. Report to the LST and Project Manager (PM) or Maintenance Manager, as applicable, all existing or latent penetrations.
- 3. New penetrations made by Contractors through existing assemblies must be properly repaired or fire stopped to match the existing rating identified in the life safety drawings. It is the responsibility of all contractors, subcontractors, vendors, all departments, and all employees working or providing services at BIDMC to understand and adhere to this Above the Ceiling Work Permit and Policy. A project will not be granted final approval until the permit has been approved as completed by assigned Facilities Department Key Personnel.

D. Exceptions

- 1. Engineers and Architects are exempt while performing investigative work.
- 2. Maintenance Department is exempt while performing work related to routine preventative maintenance, emergency work, or investigating for shut downs.

II <u>REQUIREMENTS</u>:

A. Occupied Space

- The PM or Maintenance Manager shall fill out an Above Ceiling Permit request relevant to their project. This request is sent to *Above Ceiling Permit Program acpp@bidmc.harvard.edu* mailbox (Scope of work drawing to be included). Instructions for completing the form are included as an Addendum.
- 2. The LST will perform a pre-inspection of the area and issue a permit to the PM. The permit will authorize the work to begin.
- 3. If existing deficiencies are found, the LST and the PM are to manage solving existing above ceiling deficiencies.
- 4. At the conclusion of the project, or at an appropriate time considering the sequencing of the work, the PM will notify the assigned LST that the job is ready for the required post work inspection.
- 5. The LST will conduct the post work inspection and if no further deficiencies arefound will close the permit and forward a copy to the PM/Maintenance Manager and the Program Controls Group. The LST retains a final record of the closed permit.
- 6. If additional deficiencies are noted the LST will issue an additional deficiencies list.

- 7. The PM will work with the LST to complete the added deficiency list and request a reinspection.
- 8. Items 6 and 7 repeat until the permit is closed and documented by the LST Manager.

B. Non Occupied Space

- The Project Manager (PM) or Maintenance Managers shall fill out an Above Ceiling Permit request relevant to their project. This request is sent to *Above Ceiling Permit Program acpp@bidmc.harvard.edu* mailbox (Scope of work drawing to be included). Instructions for completing the form are included as an Addendum
- 2. The Life Safety Technician (LST) issues the Above Ceiling Permit to the PM/Maintenance Managers. The permit will authorize the work to begin.
- 3. The PM/Maintenance Managers notifies the LST that at an appropriate time the area is ready for pre-inspection. This usually happens once the ceiling has been removed.
- 4. The LST will perform the above ceiling pre-inspection and if necessary issue a deficiency list to the PM.
- 5. The PM or LST will request the contractor who is doing the work to price the additional above ceiling work as a change order.
- 6. At the conclusion of the project or at an appropriate time for the sequencing of the work the PM will notify the LST that a post work above the ceiling inspection is required.
- 7. The LST will conduct the post work inspection and if no further deficiencies are found close the permit and send a copy of the closed permit to the PM/Maintenance Manager and to Program Controls Group. If additional deficiencies are noted the LST will issue another deficiency list to the PM or Maintenance Manager.
- 8. The PM will work with the LST to complete the added deficiency list and request a reinspection. Any work associated with the "project" that is located outside of the project footprint must request a separate permit for that area under the occupied space requirements.

III PERFORMANCE REQUIREMENTS FOR ABOVE-CEILING WORK:

- A. Personnel performing Above Ceiling Work within BIDMC facilities must undergo Hilti training and receive certification to install Hilti Firestop products prior to conducting any such activity. Only Hilti Firestop products and systems are allowed to be installed on BIDMC properties. All staff, contractors, and vendors must be properly identified by a badge and must display the Above-Ceiling Work Permit prominently in the working area for the duration of the project.
- **B.** During the periods of above-ceiling work in occupied areas, if the ceiling is going to be left unattended for more than four hours, the Contractor must re-install the ceiling tiles. Contractors MUST NOT leave ceiling tile open in common areas. This does not apply to construction projects under individual written ISLM guidance.
- **C.** All wiring (TV, telephone, data, etc.) must be installed in proper hangers.
- **D.** Wiring MUST NOT be supported or draped over piping, ductwork, ceiling hangers, pipe hangers, etc. or laid directly on top of ceilings or grids.
- E. For additional requirements please reference EC-56 Barrier Penetration Sealing Procedure.

- **F.** All low/medium voltage electrical work must comply with NFPA and NEC standards for conduits, raceways, junction/pull box covers.
- **G.** No wires, cables or other objects may rest on or be suspended from fire protection sprinkler piping or supports.
- **H.** All piping, ductwork, pipe hangers, duct hangers, etc. must be supported in accordance with current code requirements, industry practices, and standards.
- I. All abandoned materials (trash, wall pieces, etc.), wire, conduits, etc. must be removed above ceilings to the extent possible.
- J. Individual mechanical systems must utilize their own hanger systems unless the hangers are designed to support multiple systems. This excludes the fire protection system, which must be hung using its own independent system.
- K. Completion of all work above the ceiling and obtaining final inspection and permit sign off is a condition of Contract close-out and release of retainage.

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Approved By:

- □ Senior Management Team: Peter Healy President
- **Environment of Care Committee: K. Murray & Jarrod Dore, Co-Chairs**

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Reference: