Title: ***Barrier Penetration Sealing Procedure***

Policy #: EC-56

Purpose:

Smoke and fire barriers are required to be constructed to prevent the passage of smoke and flames. All renovation, maintenance and repair activities that effect smoke or fire barriers as identified on the Fire and Smoke Barrier Drawings (located on "S" Drive of Facilities folder) shall follow the policy and procedures to ensure the proper construction and maintenance of these barriers.

Scope:

This program applies to all medical center locations, including off-site facilities. The implementation of this program is required in all areas that contain Smoke or Fire Barriers. The scope of this policy also applies to penetrations through all floors.

Procedure:

A. General

1. The following actions shall be performed by the BIDMC employee or the vendor employee who is responsible for project oversight, including but not limited to, Facilities Project Managers, Infrastructure Project Managers, Research Facilities Project Managers, IS Managers/Project Managers, Telecom Managers/Project Managers, Trade Supervisors, Maintenance Supervisors, Security Project Managers, and Trade Lead Personnel

B. Construction/Renovation Projects/Internal Projects/Maintenance Work:

1. Department Management (those individuals listed in paragraph A1 of this policy) responsible for the work being done shall issue Fire and Smoke Barrier Drawings to BIDMC staff and/or key members of the project team including, but not limited to, Architectural/MEP Consultants, Contractor, and Project Manager/Site Supervisor :
    a. Drawings are available in electronic format through the Department of Facilities, Planning, Design and Construction
    b. If photo copied, drawings should be color coded to indicate type of barrier
    c. Record date drawings are issued

2. Department Management (those individuals listed in paragraph A1 of this policy) responsible for the work being done shall issue sealing product

literature to BIDMC staff and/or project team performing work. The product specifications should be included in Construction Documents when applicable :

a. Provide Standard HILTI specification
b. Record date standards are issued

3. Monitor Construction Progress:
The condition of Fire and Smoke barriers within the construction footprint and project scope shall be inspected and documented prior to starting construction and throughout the construction phase by the individual responsible for project supervision.
    a. If penetrations that are not properly sealed are discovered prior to work commencing or during the progress of the construction work, the Barrier Penetration Form shall be completed and submitted to the Department of Facilities, Planning, Design and Construction prior to starting or continuing any work in that area. It shall be the responsibility of the Department of Facilities, Planning, Design and Construction to insure that the sealing of these additional penetrations will be performed.
    b. Penetrations shall be sealed using HILTI product ONLY. HILTI products shall be installed by an experienced Installer who is certified, licensed by the firestopping manufacturer as having been provided the necessary training to install manufacturer's products per specified requirements. While performing sealant work at BIDMC, Installers shall carry a HILTI issued certificate card stating that they have been trained and are authorized to install HILTI product.
    c. At no time shall new sealant be installed over existing sealed penetrations unless they are HILTI labeled sealed penetrations in which case the installation of the new sealant over the existing sealed penetrations must comply with HILTI installation requirement for that type of installation.
    d. At any time during the construction of the project, any penetration left unattended for more than four (4) hours shall be sealed with HILTI temporary sealant plug CP 658 or similar HILTI temporary sealant product.
    e. Prior to the ceiling being closed, there shall be an above ceiling final inspection of all impacted barriers by the individual responsible for project supervision, including placing of the HILTI product plate (Item #00306219) or label (Item #0039611) next to work (See Attachment B)
    f. Inspection dates and comments shall be recorded by the BIDMC employee responsible for project supervision as part of the ILSM process.

4. Record Photographs:
    a. The Contractor shall take before and after digital photographs of all

penetrations in effected barriers including the labels.

b. The images shall become part of the project closeout documentation required for final payment.

c. The digital photograph file shall be provided by the Contractor responsible for the installation to the BIDMC Department of Facilities, Planning, Design and Construction for BIDMC's regulatory record files.

C. Penalty for Non-submission of Documentation:

1. Contractor understands that failure to comply on a daily basis with the procedures stated in this policy and/or failure to submit proper documentation of sealing methods and materials as part of the Close-Out/As-Built Documents will result in the withholding of final payment until conditions are resolved. Failure to comply can result in vendor being prohibited from doing future work with BIDMC.

2. BIDMC Employee understands that failure to comply with the procedures stated in this policy could result in discipline in accordance with BIDMC's Employee Correction Action Policy (PM-04).

Note: It is the responsibility of the BIDMC Project Manager to provide documentation of any construction or renovations that modifies the TJC Fire and Smoke Barrier drawings to the Department of Facilities, Planning, Design and Construction. In turn, the Department of Facilities, Planning, Design and Construction assume responsibility for updating the drawings after the completion of any project that alters their location or rating.

Attachment A: Barrier Penetration Form
Attachment B: Illustration of HILTI label

Vice President Sponsor: Walter Armstrong, Sr. VP Capital Facilities and Engineering

Approved By:
☒ EOC Committee: 3/13/13 Ken Sands & W. Armstrong
Co-Chair

Requestor Name: David Flanagan, Director of Engineering, Infrastructure & Research Facilities Planning

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Eliminated:
References
(Stakeholders): Facilities, Planning, Engineering, Energy, and Infrastructure, Program Controls Group, Contracting, Environmental Health and Safety, Maintenance Operations, Clinical Engineering, Public Safety, Telecommunication

BETH ISRAEL DEACONESS MEDICAL CENTER

Barrier Penetration Form

Today's Date:

Location(s):

Reporting Person:

Contact Information:

Project Association:

Description of penetration:

Work Completed by:

Completed Form to be submitted to:
Engineering Department c/o Peter Warwick
Libby Building
171 Pilgrim Road
2nd Floor
Fax: (617) 632-8272

EC-56 Attachment A Rev. 3/13

BETH ISRAEL DEACONESS MEDICAL CENTER
HILTIL Label

HILTI®

Fire Protection Systems
Système coupe-feu
1-800-879-8000 (U.S.)
1-800-363-4868 (Canada)

Fire Rated Assembly / Assemblage Homologue

Product / Produit:	Location / Endroit:
System # / Système #:	Tel:
Installed by: Installé par:	Installation Date: Date d'installation:
Repenetrated by / Réinstallé par:	Date:
1)	1)
2)	2)
3)	3)

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