NIH Policy Manual

26101-26-36 - Managing Work Performed Above Ceilings in NIH Owned Facilities

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Transmittal Notice

- 1. Explanation of Material Transmitted: This Manual Chapter provides the policy, procedures, and organizational responsibilities to ensure that any work performed above ceilings in the National Institutes of Health (NIH) facilities to include low voltage cabling for communication, security, fire protection, building automation, freezers, refrigerators and other control and monitoring systems are installed using uniform standards in compliance with applicable codes, standards and guidelines.
- 2. Filing Instructions:
 - a. Insert: NIH Manual Issuance 26101-26-36 dated 7/18/2018

PLEASE NOTE: For information on:

- Content of this chapter, contact the issuing office listed above.
- NIH Policy Manual, contact the Division of Management Support (DMS), OMA on 301-496-4606, or enter this URL: <u>https://oma.od.nih.gov/DMS/Pages/Manual-Chapters.aspx</u>

A. Purpose

This Manual Chapter provides the framework to ensure that uniform processes, procedures and guidelines are used by National Institutes of Health (NIH) Institutes, Centers, and Offices (ICOs) involved with performing work above ceilings in NIH facilities. This includes but is not limited to mechanical, electrical, plumbing, fire protection, information technology (IT), conferencing, security control and monitoring systems, building automation, scientific, and other specialized equipment requirements.

B. Scope

This policy applies to all ICOs involved in the acquisition, purchase, installation, service or maintenance of items above ceilings in NIH-owned facilities and requires review and

approval by Office of Research Facilities Development and Operations (ORFDO) prior to proceeding with the work.

C. Background

The ORFDO is the steward of NIH facilities and must ensure that all utilities and other distribution systems are installed in compliance with applicable building codes, standards and guidelines. Standardizing NIH installation practices for work performed above ceilings is essential to obtaining a reliable building and utilities infrastructure and to maintaining a safe environment for all occupants.

D. Policy

This policy establishes the management structure and guidelines to standardize the process and procedures for the utilization and installation of the infrastructure and work to be performed above ceilings in NIH owned facilities, to support the mission of each ICO.

E. Responsibilities

1. NIH Institutes, Centers and Offices

- a. For work to be performed *outside* the Clinical Center Complex (CCC):
 - i. Submit a <u>Cabling Installation Request</u>to the Centers for Information Technology (CIT) for all IT cabling requirements.
 - ii. Submit a <u>Security System Installation Request</u> to the Office of Research Services (ORS) Division of Physical Security Management (DPSM) for approval and guidance.
 - iii. For video, freezer and fire alarm system requirements, submit a <u>Construction Request</u> to the ORFDO for review, approval and determination of the requirements that must be met to perform the work.
 - iv. For the Research Triangle Park (RTP), North Carolina (NC) and Rocky Mountain Laboratory (RML), Hamilton, Montana (MN) campuses, submit requests in accordance with local cable installation guidelines.
- b. For work being performed *in* the CCC:
 - i. Submit a <u>Cabling Installation Request</u> to the Centers for Information Technology (CIT) for all IT cabling requirements.
 - ii. Submits <u>Security System Installation Request</u> to the Office of Research Services (ORS) Division of Physical Security Management (DPSM) for approval and guidance.
 - Submit a <u>Construction Request</u> to the Office of Research Facilities Development and Operations (ORFDO) for review, approval and determination of the requirements that must be met to perform the work.

- iv. As part of the planning process for a project, submit a Project Notification Form (PNF) for review and guidance from the ORFDO Office of Hospital Physical Environment (OHPE) and the Office of Research Services (ORS) Division of the Fire Marshal (DFM) as part of the project planning process.
- v. Submit a Construction and Above-Ceiling Work Permit Request Form (Appendix 2) for repair, renovation or construction projects.
- vi. Submit a Six-Month Construction Above-Ceilings Work Permit (CA-CWP) Request Form (Appendix 3) for routine maintenance or service work.
- c. Ensure that all ICO contractors and employees installing wiring to support equipment, information/data cabling, or making changes that impact utilities adhere to this policy.

2. The Division of Facilities Operations and Maintenance (DFOM) Facility Manager (FM), ORFDO

- a. For work to be performed *outside* the Clinical Center Complex (CCC):
 - i. Reviews Construction Requests and issues CA-CWPs (Appendix 4) for all major and minor projects.
 - Reviews maintenance and service requests and issues CA-CWPs (Appendix 5) for contractors and employees to perform maintenance and service work.
 - iii. Issues specific CA-CWPs to CIT, DPSM, IC vendors, construction contractors, maintenance contractors and government personnel.
 - iv. Ensures that all contractors and government personnel performing work above ceilings prominently display the CA-CWPs in the work area(s).
 - v. Ensures work follows guidelines provided by <u>NIH Policy Manual 1370</u> and <u>NIH Policy Manual 1381</u>.
- b. On the RTP, NC campus, the FM reviews construction and maintenance requests and follow the campus Engineering Standards and Material Requirements (ESMR) guidelines to adhere to this policy.
- c. On the RML, Hamilton, Montana campus, the local FM reviews construction and maintenance requests.

3. The Office of Hospital Physical Environment (OHPE), ORFDO

- a. Reviews <u>Project Notification Forms</u> for all work to be performed in the Clinical Center Complex (CCC).
- b. Provides guidance on how to proceed with work to comply with applicable accreditation standards and hospital policies.
- c. Reviews CA-CWP Requests (Appendix 2).
- d. Issues CA-CWPs for all projects in the CCC (major, minor, and Walk-and-Talk, etc.).

- e. Receives, reviews and issues Six-Month CA-CWPs (Appendix 3) for government personnel/service contractors to perform maintenance and service work in the CCC.
- f. Provides oversight, tracking and quality assurance services identified in <u>Section</u> <u>3-16</u> of the NIH Facilities Development Manual.

4. The Division of Facilities Stewardship (DFS), ORFDO

- a. For facilities *outside the CCC*, receives data on low voltage related deficiencies from NIH FMs and CORs including but not limited to deficiencies in fire and smoke barriers.
- b. Adds deficiencies to the facilities condition database.
- c. Evaluates and prioritizes deficiencies to develop projects to correct deficiencies.
- d. DFS role does not apply to the RTP, North Carolina and RML, Hamilton, Montana campuses.

5. The Division of Environmental Protection (DEP), ORFDO

a. Ensures that contractors and government employees performing work above ceilings are made aware of the type of materials that may be encountered while performing work.

6. The Division of Physical Security Management (DPSM), Office of Security and Emergency Response (SER), ORS

- a. Ensures that DPSM contractors and employees performing access control and security work adhere to this policy.
- b. Ensures that DPSM contractors and employees performing work display a valid CA-CWP as work is being performed.

7. The Division of Occupational Health and Safety (DOHS), Office of Scientific Resources (SR), ORS

a. Ensures that contractor and government personnel adhere to OSHA guidelines when performing work above ceilings in NIH facilities.

8. The Division of the Fire Marshal (DFM), SER, ORS

a. Provides assistance with inspections for construction and above-ceiling work performed as part of construction and renovation projects.

9. The Center for Information Technology (CIT), NIH

- a. Ensures that CIT employees and contractors performing data, information, telecommunication, and network wiring work adhere to this policy.
- b. Ensures that CIT contractors and employees performing work display a valid CA-CWP as work is being performed.

10. Contracting Officer Representatives (CORs)

- a. Obtains CA-CWPs for construction, renovation, and other major projects as assigned.
- 11. The guide to the use and organizational responsibilities under this policy are shown below:

Appendix	Purpose	Location	Issuing Office
1	Definitions	Campus-wide	OD
2	Construction	Inside CCC	OHPE
3	Recurring Maintenance	Inside CCC	OHPE
4	Construction	Outside CCC	DFOM
5	Recurring Maintenance	Outside CCC	DFOM

F. Procedures

Institutes, Centers, and Offices (ICOs), Executive Officers (EOs), Administrative Officers (AOs), Program Managers (PMs) and Contracting Officer's Representatives (CORs) initiating projects or activities that require doing work above ceilings in NIH facilities, must obtain a "CA-CWP".

1. Construction and Above-Ceiling-Work-Permit for Major and Minor Construction Projects performed <u>Outside the Clinical Center Complex</u>

- a. At least one week prior to commencement of above-ceiling work, the requestor [AO, EO, PM or COR] submits an ORFDO CA-CWP Form (Appendix 4) electronically to the <u>NIH Building Facility Manager</u> (FM).
- b. The NIH FM reviews the permit request and issues a CA-CWP, if all applicable data fields are properly filled in.
- c. Contractors are responsible for performing all work in accordance with applicable industry codes, standards, guidelines and the performance requirements identified in Appendix 4.
- d. Contractors shall report to the FM or the COR, as applicable, existing or latent penetrations discovered during the course of performing work to complete a project.
- e. The FM or COR must address the Contractor's findings with the respective ORFDO/ORS/CIT and other program areas to develop corrective action plans.
- f. New penetrations made by ORFDO/ORS/CIT/IC Contractors through existing non-rated or rated fire assemblies, must be properly repaired or fire stopped to match the existing rating identified in the contract documents.

2. Construction and Above-Ceiling-Work-Permit for Major and Minor Construction Projects performed <u>in the Clinical Center Complex</u> must be submitted in accordance with Section 3-16 of the NIH Facilities Development Manual (FDM)

- a. The COR submits an ORFDO CA-CWP Request Form (Appendix 2) electronically to ORFDO's Office of Hospital Physical Environment (OHPE).
- b. The ORFDO OHPE will review the permit request and conduct site surveys as necessary prior to issuing a CA-CWP for projects in the CCC, if all applicable data fields are properly filled in.
- c. Contractors are responsible for performing all work in accordance with applicable industry codes, standards, guidelines and the performance requirements identified in Appendix 2.
- d. Contractors shall report existing or latent penetrations discovered during the course of performing work to the COR.
- e. The COR must address the Contractor's findings with the respective ORFDO/ORS/CIT and/or other program areas to develop corrective action plans in coordination with OHPE.
- f. New penetrations made by ORFDO/ORS/CIT/IC Contractors through existing non-rated or rated fire assemblies must be properly repaired or fire stopped to match the existing rating identified in the contract documents.
- g. ORF OHPE along with ORS DFM and other stakeholders conducts final inspections prior to acceptance of work performed under a project.
- h. All contractors and government personnel performing work above ceilings must:
 - i. Possess and properly display an identification badge;
 - ii. Possess and properly display a joint commission training sticker
 - iii. Display a valid Construction (and Above-Ceiling) Work Permit in full view on the ladder(s) in the working area.

3. Above-Ceiling-Work-Permit for Service/Maintenance Activities outside the Clinical Center Complex

- a. At least one week prior to commencement of above-ceiling service/maintenance work, the ORFDO Facility Manager (FM) or Contracting Officer Representative (COR) verifies validity of existing permit or submits a completed Six-Month Above –Ceiling Work Permit (A-CWP) Form (Appendix 5) to the maintenance/service organization (For work performed on an emergency basis, contact the FM or COR immediately for this process to be streamlined).
- b. The FM will conduct site surveys as necessary and/or issue a Six-Month A-CWP, if all applicable data fields are properly filled in.
- c. Contractors and government personnel must execute above-ceiling work in accordance with the performance requirements herein and in compliance with all applicable industry codes, standards and guidelines.
- d. The FM or COR, based on the nature of the work, conducts pre-work and postwork above-ceiling inspections and forward the list of deficiencies to respective

contractor or in-house maintenance personnel for corrective action, as necessary.

- e. Contractors or government personnel shall survey and report in writing to the COR all existing unsealed penetrations, missing junction box covers and non-sprinkler components being supported by the sprinkler system, within predefined limits of work being performed, and report findings as they are discovered during the course of activity or project. The COR or FM as applicable, shall provide ORFDO DFS, when applicable, a written summary of all outstanding deficiencies not corrected during the course of work. DFS will collect data, track and initiate follow up actions to ensure compliance with applicable codes and standards.
- f. New penetrations made through non-rated or rated fire assemblies by contractors or government personnel must be properly repaired or fire stopped to match the existing rating.

4. Above-Ceiling-Work-Permit for Service/Maintenance Activities in the Clinical Center Complex

- a. At least one week prior to commencement of above-ceiling service/maintenance work, the ORFDO Maintenance Unit or COR validates the existing permit remains effective or submits an ORFDO Six-Month A-CWP Form (Appendix 3).
- b. Emergency service/maintenance work is generally covered under the Six-Month A-CWP.
- c. OHPE will conduct site surveys as necessary and issue a Six-Month A-CWP, if all applicable data fields are properly filled in.
- d. Contractors and government personnel must execute above-ceiling work in accordance with the performance requirements identified in Appendix 3, and in compliance with all applicable industry codes, standards and guidelines.
- e. The FM or COR, based on the nature of work, conducts pre-work and post-work above-ceiling inspections and forwards the list of deficiencies to respective contractor or in-house maintenance personnel for corrective action, as necessary.
- f. Contractors or government personnel shall survey and report in writing to the COR, all existing unsealed penetrations, missing junction box covers and non-sprinkler components being supported by the sprinkler system, within predefined limits of work being performed, and report findings as they are discovered during the course of activity or project. The COR or FM as applicable, shall provide ORFDO OHPE a written summary of all outstanding deficiencies not corrected during the course of work. OHPE will collect data, track and initiate follow up actions to ensure compliance with applicable accreditation standards and codes.
- g. New penetrations made through a non-rated or rated fire assemblies by contractors or government personnel must be properly repaired or fire stopped to match the existing rating.

G. References

- 1. International Building Code (IBC)
- 2. National Fire Protection Association (NFPA) 101 Life Safety Code (LSC)

- 3. NFPA 70 National Electric Code (NEC)
- 4. Telecommunication Industry Association (TIA)/Electronics Industry Association (EIA) 802.11 Wireless
- 5. ANSI/TIA/EIA-568-C Generic Telecommunications Cabling for Customer Premises
- 6. ANSI/TIA/EIA-598-C Telecommunications Pathways and Spaces
- 7. ANSI/TIA-1179-2010 Healthcare Facility Telecommunications Infrastructure Standards
- 8. Building Industry Consulting Service International (BICSI) Standards
- 9. <u>NIH Policy Manual 1370</u> Fire Protection and Life Safety Building Permit Process
- 10. <u>NIH Policy Manual 1381</u> Physical Security Project Requirements for NIH Owned and Leased Facilities
- 11. <u>NIH Policy Manual 1743</u> Keeping and Destroying Records
- 12. National Institutes of Health (NIH) Design Requirements Manual (DRM)
- 13. <u>NIH Facilities Development Manual (FDM) Section 3-10 Clinical Center Complex</u> (CCC) Interim Life Safety Measures and Construction Risk Assessment (CRA)
- 14. <u>NIH Facilities Development Manual (FDM) Section 3-16 Clinical Center Complex</u> (CCC) Construction and Above-Ceiling Work Permit

Appendix 1: Definitions

- 1. Above Ceiling Work Permit Permission to access and/or perform maintenance, service, alteration or installation work in ceiling or plenum areas above occupied spaces.
- 2. Alterations Improvements that consist of any betterment or change to an existing facility to allow its use for a different purpose.
- 3. Clinical Center Complex (CCC) Buildings 10 and 10B, Mark O. Hatfield Clinical Research Center (CRC) and the INVIVO (NMR) Addition, NIH Bethesda campus.
- 4. **Common Areas** Public corridors, restrooms, break rooms, lobbies, and housekeeping closets.
- 5. Contracting Officer's Representative (COR) An individual, including a contracting officer's technical representative (COTR), designated and authorized in writing by the contracting officer to perform specific technical or administrative functions.
- 6. **Fire-resistance Rating** The fire-resistance rating of building elements or assemblies as tested in accordance with Underwriters Laboratories and other standards.
- 7. **Fire Stop** Materials and methods of construction used to protect the integrity and fire-resistance-rating of building elements, components, or assemblies.
- 8. Items Above Ceilings Includes security, communications, and building automation systems, equipment and components.
- 9. **Renovation** Improvements that consist of any betterments or changes to an existing facility to allow continued or more efficient use within its designated purpose.
- 10. **Repair** The restoration of a failed or failing building system or component to a condition that restores its effective use for its designated purpose.
- 11. **Maintenance** Work to keep a facility and/or building system or component in a continuous usable state or condition

- 12. **Plenum** Space above ceilings used for the distribution of utility systems. See the Life Safety Code (LSC) and the NIH Design Requirements Manual (DRM) for specific restrictions on use of plenums.
- 13. **Project** Any activity involving the installation of low voltage cabling above ceilings in NIH buildings to support communication, security, fire protection, building automation, freezers, refrigerators and other control and monitoring systems.

Appendix 2: ORFDO Construction Work Permit (Work Performed Above-Ceilings Inside The Clinical Center)

<u>SECTION A:</u> (To be completed	by Contractor/perso	on performing work)
Construction Permit Application I	Date:	
Permit required by date:		
Project / Work Request / Service I	Request No.:	
Project Title:		
Location of Work: BLDG:	Floors:	Room Nos.:
Nature of Activity:		
* Construction * Major/Minor * N	New Utility System *	Equipment * Repairs/Service
* Above-ceiling work anticipated		
Contractor/Person Performing Wo	ork:	
Permit Requestor (Contract Person	n, PO):	
Contact Information:		
Emergency/Cell Phone:		
Project Approval Process:		
• DTR Design Permit: * Yes	* No * N/A	
• PN/CP Form submitted - Da	ate:	
1 0		Protection and Life Safety Building
Permit Process: * Yes * No	* N/A - Date:	
Planned /Anticipated Duration:		
Type of Work / Trades: Please ide activity	entify all applicable	types of work associated with the

() Electrical	() Other Cables	() HVAC	() Fire alarm/suppression system
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() Data / IT / TV () Insulation work () Security () Telephone

() Tube system () Plumbing system () Piping () Sewer systems

() Lighting () Other Systems

Submit permit request electronically / hard copy along with Project Notification / Construction Notification (PN/CP) Form to Office of Hospital Physical Environment (OHPE)

<u>SECTION B:</u> (*To be completed by OHPE*)

Permit issuing Office Note: All work must be performed in compliance with SOW, applicable industry standards and ORFDO performance requirements for above-ceiling work within the Limits of Construction. <u>Valid Permit must be displayed at work site at all times</u>. Failure to display permit may result in stoppage of work.

Period for which Permit is Valid: through

Initial Inspection / Permit Authorization:

OHPE Signature_____ Date: _____

SECTION C:

Required Close-out Signatures: Contractor/Sub-Contractor/Person performing work/Tradesman: I certify that work performed conforms to all applicable industry standards and ORFDO permitting requirements for performance of above-ceiling work within the limits or scope of construction. Notified the Project Officer (PO) in writing of non-code compliant items discovered prior to start of work within limits of construction and outside SOW. \Box Yes \Box No

Contractor Name:	Signature:	
Date:		
Final Inspection DFM signoff:	Date:	
Final Inspection PO signoff:	Date:	
PERMIT INSTRUCTIONS AND FOLLOW UP		

This permit must be present on all ladders or carts used to perform above- ceiling work. Accessing any ceilings or performing any work without a permit will result in immediate work stoppage and may result in indefinite termination of all activities by the contractor. Contractor s supervisor will be required to meet with ORFDO and respective work requestor or representatives or PO to determine a clear understanding of these requirements before any contractor staff will be permitted to resume work with in the facility.

To be a valid permit, the initial inspection sign off block must be signed by authorized personnel.

All hospital staff is encouraged to report anyone performing work above the ceiling without such a permit to ORFDO call desk at 301-435-8000.

PERFORMANCE REQUIREMENTS FOR ABOVE-CEILING WORK

These requirements apply to all contractors and vendors performing project work and also to all in-house maintenance personnel performing above-ceiling work.

1. All staff, contractors, and vendors must be properly identified by a badge and must display the issued Construction and Above-Ceiling Work Permit in full view on the ladder(s) in the working area.

2. All ladders used in above-ceiling work must be constructed of nonconductive material to protect the technician from electrical shock and will have the required OSHA and safety labels.

3. During the periods of above-ceiling work, if the ceiling is going to be left unattended for more than 15 minutes, the Contractor must re-install the ceiling tiles. Contractors <u>MUST NOT</u> leave ceiling tile open in common areas.

4. All wiring (TV, telephone, data, etc.) must be installed in proper hangers.

Wiring <u>MUST NOT</u> be supported or draped over piping, ductwork, ceiling hangers, pipe hangers, etc. or laid directly on top of ceilings or grids.

5. All low/medium voltage electrical work must comply with the applicable

NFPA/NEC standards (e.g. conduits, raceways, junction/pull box covers).

6. No wires, cables or other objects may rest on or be suspended from fire protection sprinkler piping or supports.

7. All piping, ductwork, pipe hangers, duct hangers, etc. must be supported in accordance with current NIH requirements, industry codes and standards.

8. All abandoned materials (trash, wall pieces, etc.), wire, conduits, etc. must be removed above ceilings to the extent possible.

9. All cabling must be rated for a plenum environment.

Appendix 3: ORFDO Six-Month Above-Ceiling Work Permit (O&M Personnel) (Work Performed Inside The Clinical Center Complex)

Issue Date: Ex	piration Date:
Operations & Maintenance Person Holding Pe	ermit:
Facility Manager/Supervisor/PO/COR:	
Contact Information:	
Type of Work / Trades:	
() Electrical	
() Data/IT/TV	
() Security	
() Telephone	
() Other Cables	
() Medical Gases	
() Piping	
() HVAC	
() Insulation work	
() Lighting	
() Fire alarm/suppression system	
() Nurse Call system	
() Tube system	
() Plumbing system	
() Sewer systems	
() Fire stopping	
() Survey/Inspection	
() Emergency Service/Maintenance Work	

Note: All work must be performed in compliance with CRA, ILSM, applicable industry standards and ORFDO performance requirements for above-ceiling work.

Permit Authorization:

OHPE Signature _____ Date: _____

Building Occupant: If you have compliments or complaints about my work, please call my

Facility Manager/Supervisor/PO/COR (above) and OHPE at 301-594-6472.

Appendix 4: ORFDO Construction Work Permit (Work Performed) Above-Ceilings Outside The Clinical Center)

<u>SECTION A:</u> (To be completed by *Contractor/person performing work*)

Construction Permit Application Dat	te:	
Permit required by date:		
Project / Work Request / Service Red	quest No.:	
Project Title:		
Location of Work: BLDG:	Floors:	Room Nos.:
Nature of Activity:		
* Construction * Major/Minor * Nev	v Utility System * Equ	ipment * Repairs/Service
* Above-ceiling work anticipated		
Contractor/Person Performing Work	:	
Permit Requestor (Contract Person, PO):		
Contact Information:		
Emergency/Cell Phone:		
Project Approval Process:		
• DTR Design Permit: * Yes * N	No * N/A	

- PN/CP Form submitted Date:
- Complied with NIH Policy Manual 1370 Fire Protection and Life Safety Building Permit Process: * Yes * No * N/A Date: ______

Planned /Anticipated Duration:

Type of Work / Trades: *Please identify all applicable types of work associated with the activity*

() Electrical () Other Cables () HVAC () Fire alarm/suppression system

() Data / IT / TV () Insulation work () Security () Telephone

() Tube system () Plumbing system () Piping () Sewer systems

() Lighting () Other Systems

Submit permit request electronically to the Division of Facilities Operations and Maintenance (DFOM), Building Facility Manager (FM)

<u>SECTION B:</u> (*To be completed by DFOM/FM*)

Permit issuing Office Note: All work must be performed in compliance with SOW, applicable industry standards and ORFDO performance requirements for above-ceiling work within the Limits of Construction. <u>Valid Permit must be displayed at work site at all times</u>. Failure to display permit may result in stoppage of work.

Period for which Permit is Valid: ______ through ______

Initial Inspection / Permit Authorization:

OHPE Signature _____ Date: _____

SECTION C:

Required Close-out Signatures: Contractor/Sub-Contractor/Person performing work/Tradesman: I certify that work performed conforms to all applicable industry standards and ORFDO permitting requirements for performance of above-ceiling work within the limits or scope of construction. Notified the Project Officer (PO) in writing of non-code compliant items discovered prior to start of work within limits of construction and outside SOW. Yes No

Contractor Name: ______ Signature:

Date:

Final Inspection DFM signoff: _____ Date: _____

PERMIT INSTRUCTIONS AND FOLLOW UP

This permit must be present on all ladders or carts used to perform above- ceiling work. Accessing any ceilings or performing any work without a permit will result in immediate work stoppage and may result in indefinite termination of all activities by the contractor. Contractor's supervisor will be required to meet with ORFDO and respective work requestor or representatives or PO to determine a clear understanding of these requirements before any contractor staff will be permitted to resume work with in the facility.

To be a valid permit, the initial inspection sign off block must be signed by authorized personnel.

All hospital staff is encouraged to report anyone performing work above the ceiling without such a permit to ORFDO call desk at 301-435-8000.

PERFORMANCE REQUIREMENTS FOR ABOVE-CEILING WORK

These requirements apply to all contractors and vendors performing project work and also to all in-house maintenance personnel performing above-ceiling work.

1. All contractors, government personnel, and vendors must be properly identified by a badge and must display a valid CA-CWP in full view on the ladder(s) in the working area(s).

2. All ladders used in above-ceiling work will be constructed of nonconductive materials and include Occupational Safety and Health Association (OSHA) and safety label(s).

3. During the periods of above-ceiling work, if the ceiling is going to be left unattended for more than 15 minutes, the Contractor must re-install the ceiling tiles. Contractors <u>MUST NOT</u> leave ceiling tile open in common areas.

4. All wiring (TV, telephone, data, etc.) must be installed in proper hangers.

Wiring shall NOT be supported or draped over in any form or fashion to piping, ducting, ceiling hanger, pipe hanger, etc. or laid directly on top of ceilings or grids.

5. All low/medium voltage electrical work, must comply with the applicable

NFPA/NEC standards (e.g. conduits, raceways, junction/pull box covers).

6. No wires, cables or other objects may rest on or be suspended from fire protection sprinkler piping or supports.

7. All piping, ductwork, pipe hangers, duct hangers, etc. must be supported in accordance with current industry codes and standards and NIH requirements.

8. All abandoned materials (trash, wall pieces, etc.), wire, conduits, etc. must be removed above the ceilings to the extent possible.

9. All cabling must be rated for a plenum environment.

Appendix 5: ORFDO Six-Month Above-Ceiling Work Permit (O&M Personnel) (Work Performed Outside The Clinical Center Complex)

Issue Date:	Expiration Date:
Operations & Maintenance Person Holding	g Permit:
Facility Manager/Supervisor:	
Contact Information:	
Type of Work / Trades:	
() Electrical	
() Data/IT/TV	
() Security	
() Telephone	
() Other Cables	
() Piping	
() HVAC	
() Insulation work	
() Lighting	
() Fire alarm/suppression system	
() Tube system	
() Plumbing system	
() Sewer systems	
() Fire stopping	
() Survey/Inspection	

Note: All work must be performed in compliance with applicable industry standards and ORFDO performance requirements for above-ceiling work.

Permit Authorization:

DFOM FM Signature _____ Date: _____

Building Occupant: If you have compliments or complaints about my work, please call my

Facility Manager/Supervisor (above) at 301-435-8000