

Blind Penetrations (Cutting/Drilling) into Walls, Floors & Ceilings

Exclusions from this permitting process are:

- Up to 1” into CMU walls;
- The thickness of gypsum-board sheet for penetrations in gypsum board wall assemblies (if using self drilling wall anchors a permit is not required);
- Up to 1.5” into the top side of a concrete floor/slab. (Permits are always required for any penetrations into the bottom side of any concrete floor);
- Drill stops are always required.

A permit does not guarantee that a utility is not present. All precautions need to be taken to safe guard individuals during the penetration activity.

Policy:

Cutting/Drilling blind penetrations into Walls, Floors & Ceilings at Jefferson Lab shall be performed only after utilities have been located and marked by a competent person. Refer to Fig. 1 for exclusions.

Instructions:

1. Obtain and print a copy of the instructions and permit from the Facilities web page:
<http://www.jlab.org/fm> under “Fillable Forms”
2. Filling out Page 1
 - a. *At the top of the page enter the date the permit is required.*
 - b. *In section “I. Requester”*
 - i. *Fill in the Company of JLab group that is going to be performing the work*
 - ii. *The contact phone number for the Company or JLab group*
 - iii. *The location of the Penetration*
 - iv. *Desired start date of work*
 - v. *Purpose of penetration*
 - vi. *The supervisor of the penetration work and a contact phone number*
 - vii. *If a work order was submitted, add the number in the appropriate box*
 - viii. *Provide a Project tile*
 - ix. *If applicable, provide an account code*
 - x. *How to Identify an interior or exterior penetration of a building or structure*
 1. *Use a project drawing or a diagram to illustrate the location of the penetrations. Use nearby structures or reference points to better identify locations. Attach the drawing or diagram to the back of the permit.*
 2. *Or provide a sketch at the bottom of the page identifying locations of the penetrations. Use nearby structures or reference points to better identify locations.*
3. Filling out Page 2

a. *Subject Matter Experts Approval- section II*

- i. Subject Matter Experts must review and sign off on the permit prior to having a locating company contacted to mark the utilities.
- ii. If work is to be done within the Accelerator site a signature from Accelerator OPS is required. See page three of the permit request for authorized individuals
- iii. If work is to be done within the Accelerator site or a surface that functions as a physical barrier to a radiologically-controlled area a signature from RADCON is required. See page three of the permit request for authorized individuals
- iv. For all permit requests, authorized Facilities Subject Matter Experts signatures are required for Electrical, Chilled, Cooling, Low Conductivity Water, Potable Water, Sewer, Communications and Data lines, Stormwater, Fire Protection and Life Safety Systems and Natural Gas systems. See page three of the permit request for authorized individuals.
- v. For Building and Support structures an authorized Facilities Subject Matter Expert signature is required. See page three of the permit request for authorized individuals.
- vi. If interruption or a potential of interruption to building operations, the appropriate Building Manager's signature is required.

b. SOTR, Project Mgr, Inspector or Subcontractor Information – section III

- i. A JLab SOTR or contact name and phone number must be entered.
- ii. The rest of this section will be filled out by the locating company or Facilities. Submit the Permit to Facilities Drafting.
- iii. Facilities will arrange for the utilities in the work area to be marked. Once the area is marked the permit is ready for final approval by the Director of Facilities, or his/her designee.
- iv. Facilities will notify the requester after the final approval signature is obtained.

4. Page 3 - Final Approval – section V.

- i. Check page 3 to verify the Director of Facilities or designee has signed and dated the permit. Also read and communicate any comments added to the signature area.
- b. If facilities assisted in the permit process, the SOTR, Project Manager, Inspector must field verify the utilities with the requester after they have been marked.

c. After work is completed.

Return entire permit to Facilities Drafting (SSC Building, room 75) after completion of cutting/drilling activities. If additional utilities are located or encountered (or marked utilities are not found in their expected locations) then the Requester shall provide an "as-built" sketch to Facilities Drafting precisely detailing the location(s) of all utilities that were found to not be in the location expected.



FLOOR, WALL and CEILING PENETRATION PERMIT REQUEST

Exclusions for this permit are: penetrations up to 1" into CMU walls, the thickness of gypsum-board sheet (self drilling wall anchors do not require a permit) and up to 1.5" into the top side of concrete floors. Drill Stops are required.

Submit request to Facilities Management **at least seven days before needed start date.**

This permit is valid for 14 days from the approval date unless specifically authorized by Facilities on this permit.

DO NOT start work until you have received a signed, approved copy of this document.

I. Requester			
Company or JLab Group performing work:	<input type="text"/>	Phone number:	<input type="text"/>
Location of penetration:	<input type="text"/>	Desired start date:	<input type="text"/>
Purpose of penetration:	<input type="text"/>		
Supervisor of penetration work:	<input type="text"/>	Phone number:	<input type="text"/>
Work Order Number	<input type="text"/>	Project Title:	<input type="text"/>
		Account Code:	<input type="text"/>

For interior or exterior penetration of a building or structure, use project drawing, a sketch below, or attach diagram to illustrate location relative to nearby structure or reference points inside the building.

II. SME APPROVAL

System	Comment	Reviewed/Approved By	Date
Accelerator OPS	Required for any work within the accelerator fence		
RADCON	Required for any work within the accelerator fence and on any structure or surface that functions as a physical barrier to a radiological-controlled area		
Electrical	All Permits		
Chilled, Cooling, Low Conductivity Water	All Permits		
Potable Water	All Permits		
Sewer	All Permits		
Communications/Data	All Permits		
Stormwater	All Site		
Structural	Within structures		
Fire Protection/Life Safety Systems	All Permits		
Natural Gas	All Permits		
Other – Bldg Manager	If Applicable		

Comments:

Return this permit to Facilities Drafting for Location Services and Permit Approval

III. Services under this section are to be performed by Facilities

JLab SOTR or contact: Phone number:

Name of locate service used: Technician name: (first, last)

Locating equipment used:

Make/Model	Serial Number:	Calibration Due Date:
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Site or building drawing(s) used:

Date utilities located & marked: Additional location or verification required? Yes No

POC for advance building notification & other emergency contacts:

<input style="width: 95%; height: 20px;" type="text"/> <input style="width: 95%; height: 20px;" type="text"/> <input style="width: 95%; height: 20px;" type="text"/>	Phone numbers: <input style="width: 95%; height: 20px;" type="text"/> <input style="width: 95%; height: 20px;" type="text"/> <input style="width: 95%; height: 20px;" type="text"/>
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Comments, notes:

V. Facilities Mgmt. Approval

Date:

Comments:

A copy of the Signed Permit is to be provided to Facilities Drafting (Bldg 28, room 75)
Permit and As-Built Drawings (if any) Returned to Facilities Management Drafting

By: _____ Date: _____

Authorized SMEs

System	SME Department	SMEs
Accelerator OPS	Accelerator OPS	Steve Suhring/Randy Michaud/Arne Freyberger
RADCON	Required for any work within the accelerator fence and on any structure or surface that functions as a physical barrier to a radiologically-controlled area	Keith Welch/Pavel Degtiarenko/David Hamlette/Gina Dixon/Vashek Vylet
Electrical	Facilities - FME	Paul Powers/Bob Rice
Chilled, Cooling, Low Conductivity Water	Facilities - FMM	Carroll Jones/Mike Sprouse/Celia Whitlatch
Potable Water	Facilities - FMFC	Carroll Jones/Mike Sprouse
Sewer	Facilities - FMFC	Carroll Jones/Mike Sprouse
Communications/Data	Facilities -	Jason Willoughby/Bob Rice
Stormwater	Facilities - FMFC	Debra Brand/Ed Winslow
Structural	Facilities - FMFC	Suresh Chandra/Tom Renzo
Fire Protection/LLS	Facilities - FMFS	Dave Kausch/Tim Minga
Natural Gas	Facilities - FME	Carroll Jones/Bob Rice

APWA Uniform Color Code

WHITE	Proposed excavation
Pink	Temporary survey marking
Red	Electric power cable or conduit
Yellow	Gas, oil, petroleum, gaseous materials

Orange	Telecommunications, data, alarm cables
Blue	Potable water
Purple	Irrigation water
Green	Sewers & drains