



LOS ANGELES COUNTY DEPARTMENT OF HEALTH SERVICES
HARBOR-UCLA MEDICAL CENTER

SUBJECT: RADIATION SHIELDING DESIGN

POLICY NO. 470E

CATEGORY: Safety	EFFECTIVE DATE: 4/19
POLICY CONTACT: Yvette Ruiz	UPDATE/REVISION DATE: 2/22
REVIEWED BY COMMITTEE(S): Radiation Safety Committee	

PURPOSE:

To comply with Los Angeles County Code of Ordinances, Title 11 Health and Safety, Division 1, Health Code Chapter 11.22, Industrial Establishment, Part 6, Health Hazard Control California.

POLICY:

Harbor-UCLA Medical Center must adhere to the Los Angeles County Code of Ordinances Title 11, Chapter 11.22, Part 6, and Section 11.22.620 "Control Systems - Plan Review and Approval Prerequisite" by ensuring that shielding designs are filled with the Radiation Management Unit of the Los Angeles County - Department of Public Health for review and approval prior to installation and/or substantial modification.

PROCEDURE:

At Harbor-UCLA Medical Center, the Department of Facilities Management and Radiation Safety Office under the Environmental Health and Safety Department will collaborate closely to ensure all shielding designs, plans and/or modifications are approved according to the Los Angeles County Code of Ordinances, Title 11. Radiation Safety Office once notified by the Department of Facilities Management ensures that shielding designs are filed with the Environmental Health/Radiation Management Unit of the Los Angeles County Department of Public Health for review and approval prior to installation and/or substantial modification.

I. FACILITIES MANAGEMENT DEPARTMENT

Facilities Management will:

1. Notify the Radiation Safety Office when shielding and/or any modification is required.
2. Work with a Radiation Specialist and/or physicist.
3. Provide architectural designs, plans and/or modifications to the Radiation Specialist and/or Physicist to obtain State approval.

REVISED: 2/22

REVIEWED: 4/19, 2/22

APPROVED BY:

Anish Mahajan, MD
Chief Executive Officer
Chief Medical Officer

Griselda Gutierrez, MD
Associate Chief Medical Officer

Jason Black, MBA, DNP, RN
Chief Nursing Officer



**LOS ANGELES COUNTY DEPARTMENT OF HEALTH SERVICES
HARBOR-UCLA MEDICAL CENTER**

SUBJECT: RADIATION SHIELDING DESIGN

POLICY NO. 470E

II. RADIATION SAFETY OFFICE

The Radiation Safety Office under the Environmental Health and Safety Department is responsible for the following:

1. Collaborating closely with the Department of Facilities Management to obtain information on any shielding installation or modifications.
2. Providing architectural designs, plans and/or modifications to a Health Physicist for final review and recommendations before State and County approval.
3. Filing a "Radiation Shielding Plan" application with the:

Radiation Management Unit
Los Angeles County Department of Public Health
3530 Wilshire Boulevard, 9th floor,
Los Angeles, CA 90010.

Application can be obtained at www.publichealth.lacounty.gov/eh/ep/rad_health/.
Any questions can be address at (213) 351-7897. (Attachment I)

REFERENCES:

Los Angeles County Code of Ordinances, Title 11 Health and Safety, Division 1, Health Code Chapter 11.22, Industrial Establishment, Part 6, Health Hazard Control California.



RADIATION SHIELDING PLAN APPLICATION

Environmental Health Division

5050 Commerce Drive, Baldwin Park, CA 91706

www.publichealth.lacounty.gov/eh

(888) 700-9995

PURSUANT TO LOS ANGELES COUNTY ORDINANCE 11.22.620, RADIATION SHIELDING DESIGNS MUST BE APPROVED BY THIS OFFICE FOR ALL X-RAY AND P.E.T. / C.T. ROOMS.



COUNTY OF LOS ANGELES

Public Health

INSTRUCTIONS:

1. Must be printed or typed clearly. Where indicated, check the appropriate box. All information must be provided. An incomplete application will result in delays.
2. Plan approval requires payment of fee and completion of Sections 1 through 12.
3. Make check or money order payable to Los Angeles County.
4. Mail the **ORIGINAL** and one copy of this application and room schematics with check or money order to:

RADIATION MANAGEMENT
LOS ANGELES COUNTY DEPARTMENT OF PUBLIC HEALTH
3530 WILSHIRE BOULEVARD, 9TH FLOOR
LOS ANGELES, CA 90010

Website: <http://www.publichealth.lacounty.gov/eh/about/radiation-management-program.htm>

5. If you have any questions, contact the above office at **(213) 351-7897**

6. PLANS SUBMITTED BY:

NAME:

ADDRESS: (First) (Last)

CITY:

STATE: ZIP:

PHONE: ()
Area Code

7. JOB/X-RAY MACHINE LOCATION:

NAME & TITLE:

FACILITY-D.B.A.: (First) (Last) (Title)

ADDRESS:

CITY: ZIP:

PHONE: ()
Area Code

8. Is this an addition to existing equipment at this location? YES NO
 Is this equipment only replacing existing equipment at this location? YES NO
 Is this equipment being relocated from another address? YES NO
 If "YES", what was the name, address and registration number of the previous/current location?

NAME: _____

ADDRESS: _____

CITY: _____ ZIP: _____

REGISTRATION NUMBER: _____

IF PHYSICIST REPORT IS SUBMITTED, SECTIONS 9 AND 10 NEED NOT BE COMPLETED

9. EQUIPMENT AND USE SPECIFICATIONS:

Machine Type: Radiographic

Fluoroscopic

Therapy

Computed Tomography (C.T.)

(P.E.T.) / (C.T.)

Dental-Coned Beam Volumetric Tomography (CBVT)

Dental-Intraoral

Dental-Panoramic

Dental-Cephalometric

Chiropractic

Podiatry

Veterinary

Industrial

OTHER (Specify): _____

Maximum

Kilovolt peak
(kVp) USED _____

Maximum

milliamperere(mA) _____

Average Exposure

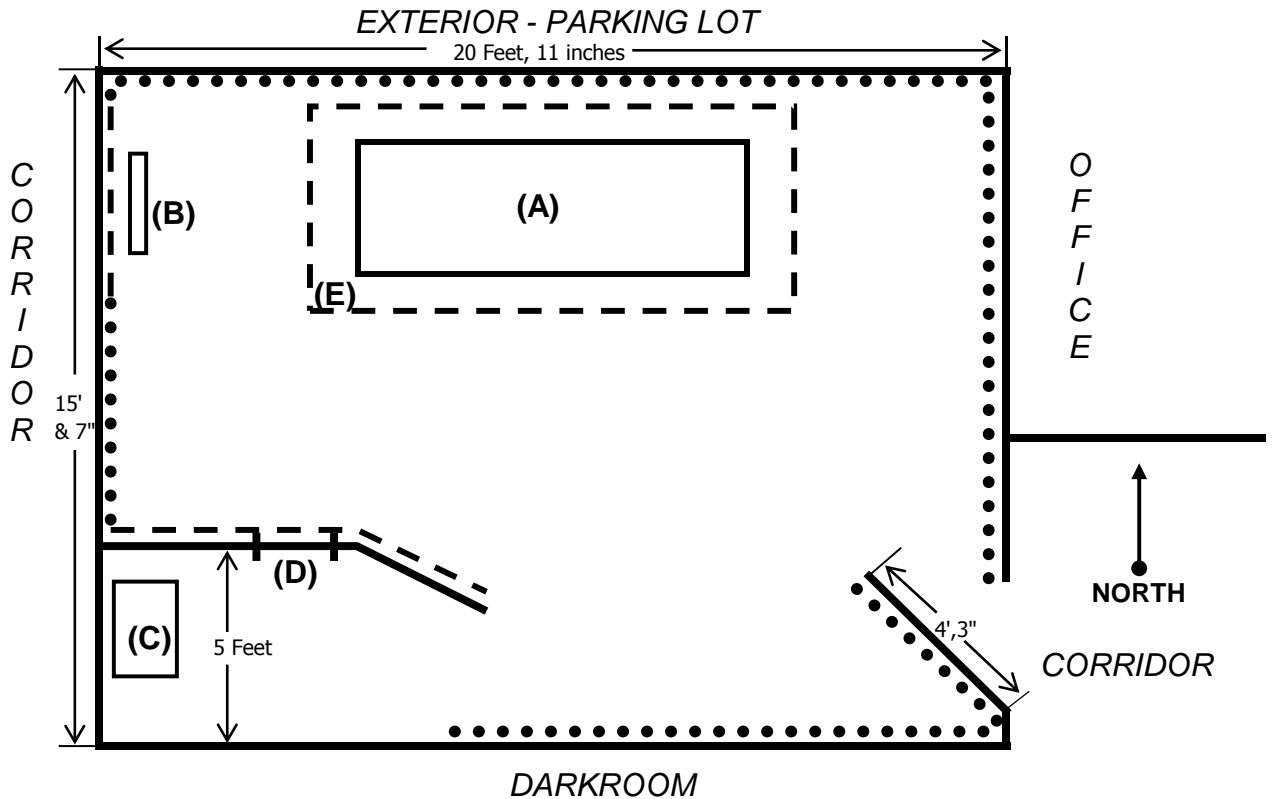
Time (Second): _____

Average Number Of

Exposures Per Week: _____

Fluoroscopic On-Time (In Minutes per Week): _____

Sample Radiographic Room



KEY:

Scale: 1/4 inch = 1 Foot

- Two pound lead, 80 inches high
- — — Four pound lead, 80 inches high
- (A) X-ray Table
- (B) Vertical Cassette Holder
- (C) Control/Operator Location
- (D) Four pound lead glass view window
- (E) Four pound lead mat centered under table, extending one-foot beyond edges of table.

SPECIFICATIONS FOR RADIOGRAPHIC ROOM:

Location: 2nd Floor of 3-Story Building.

X-ray Use: Tube directed to table = 75%. Tube directed to wall holder = 25%.

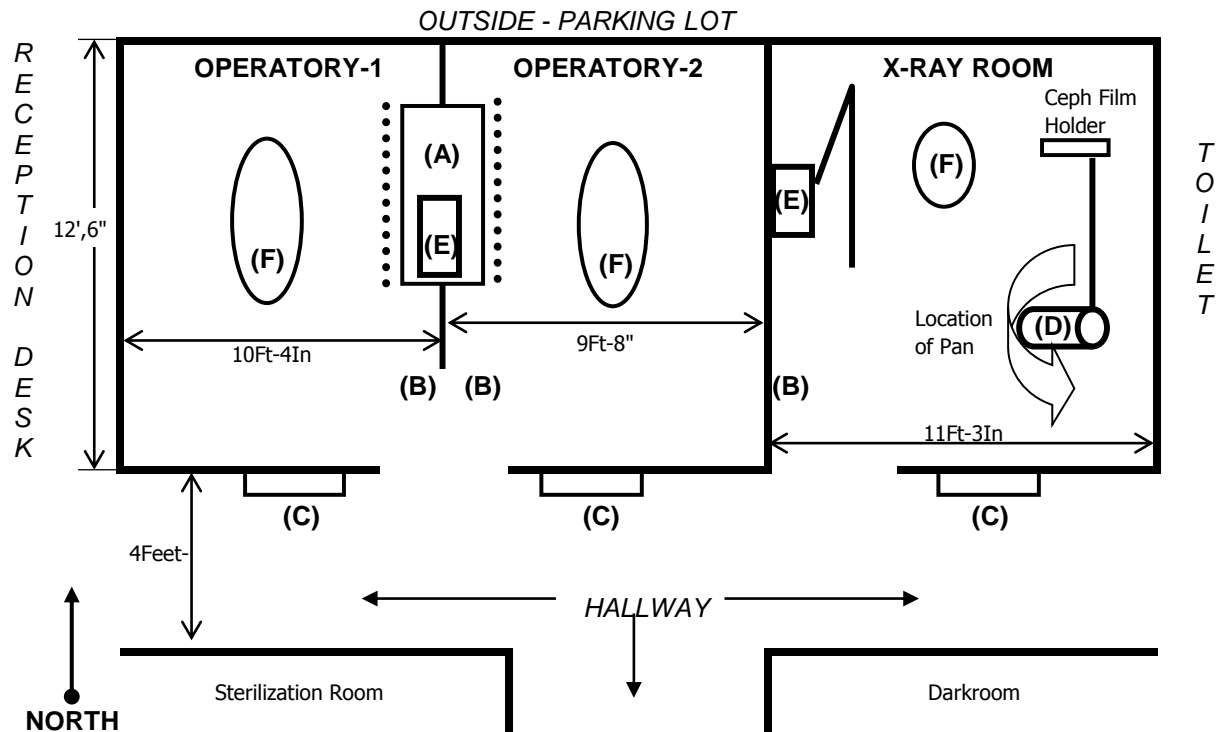
Walls: Interior walls with 5/8-inch thick drywall on each side.
Exterior wall with 1-inch thick stucco.

Floor-to-floor distances and occupancies:

- Above: 15 Feet Floor to Floor. Attorney's office above
- Below: 12 Feet Floor to Floor. Pharmacy below.

Floors: Ceiling: 3-inch thick lightweight concrete on wood support.
Floor: 5-inch thick normal weight concrete.

Sample Dental Clinic



- KEY:**
- Scale:** 1/4 inch = 1 Foot
- (A) Cabinet with X-ray unit that will swing between rooms. Cabinet doors constructed of 1/2"- plywood, covered with two-pound lead (•••••).
 - (B) Location of mirrors enabling operator to visualize patient from protected position.
 - (C) Control Switch / Operator Location
 - (D) Panoramic / Cephalometric X-ray Unit
 - (E) Intraoral X-ray Unit
 - (F) Dental Chair = Patient is facing *NORTH* during X-ray in Operatories 1 & 2. Patient is facing *SOUTH* in the X-ray Room.

SPECIFICATIONS FOR DENTAL CLINIC:

Location: 1st Floor of 3-Story Building.

Walls: Interior walls with 5/8-inch thick drywall on each side.
Exterior wall with 1-inch thick stucco.

Floor-to-floor distances and occupancy:
Above: 12 Feet Floor to Floor. Attorney's office above.
Below: 9 Feet Floor to Floor. Pharmacy below.

Floors: Ceiling: 5-inch thick normal weight concrete.
Floor: 3-inch thick lightweight concrete on wood support