

29 February 1996

REVISED October 1996

Radiation Therapy VA Design Guide



Final Draft

Department of Veterans Affairs
Veterans Health Administration
Office of Facilities Management
Facilities Quality Office
Standards Service
202.565.6775

VA DESIGN GUIDE RADIATION THERAPY SERVICE

FINAL DRAFT

DEPARTMENT OF VETERANS
AFFAIRS VETERANS HEALTH
ADMINISTRATION OFFICE OF
FACILITIES MANAGEMENT

Foreword

The material contained in the Radiation Therapy Service Design Guide is the culmination of a partnering effort by the Department of Veterans Affairs Radiation Therapy Service, the Department of Veterans Affairs Veterans Health Administration, and the Facilities Quality Office. The goal of the Design Guide is to simplify the design process and to ensure the quality of VA facilities while controlling construction and operating costs.

This document is intended to be used as a guide and to supplement current technical manuals and other VA criteria in planning a Radiation Therapy Service. The Design Guide is not to be used as a standard design and use of the Design Guide does not preclude the need for a functional and physical design program for each specific project. It is the project Architects and Engineers responsibility to develop a complete and accurate project design that best meets the users needs and applicable code requirements.

Lloyd H. Siegel, FAIA
Director, Facilities Quality Office

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Section 1

**Introduction,
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Introduction

The Radiation Therapy Service Design Guide is intended to be a graphic consolidation of existing Department of Veterans Affairs standards and criteria. It contains data from the following sources:

- Master Construction Specifications PG-18-1
- Construction Standards H-18-3
- Standard Details PG-18-4
- Equipment Guide List PG-7610
- List of Equipment symbols PG-18-6
- Space Planning Criteria H-18-9
- Barrier-Free Design Handbook H-18-13
- Room Finish and Door Hardware Schedule PG-18-14
- Various Technical Criteria (Design Manuals) pertaining to Architectural, HVAC, Plumbing, and Electrical.
- Consensus information from various VA medical centers.

The Design Guide refers to the above mentioned sources when data is either too detailed or too broad to be included in this guide.

The Design Guide for Radiation Therapy Service was developed as a design tool to assist the medical center staff and the contracting officers in better understanding the choices that designers ask them to make, and to help designers understand the functional requirements necessary for proper operation of Radiation Therapy Service.

The Guide Plates contained in Radiation Therapy Service Design guide are intended as illustrations of VA's furniture, equipment and personnel space needs. They are not meant to limit design opportunities.

This Design Guide is not intended to be project-specific. While it does contain the vast majority of spaces required in Radiation Therapy Service, it is not possible to foresee all future requirements. The project-specific space program is the basis for an individual project design. It is important to note that the guide plates are a generic graphic representation only.

Equipment manufacturers should be consulted for actual dimensions, shielding and utility requirements. Use of this Design Guide does not supersede the project architect's and engineers' responsibilities to develop a complete and accurate design that meets the user's needs and the appropriate code requirements.

Acknowledgments

Credit is due to the following individuals whose guidance, advice, and effort made this publication possible:

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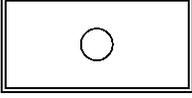
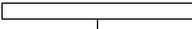
Abbreviations

A	Amperes	NA	Not Procured with Activation Funds
AC/HR	Air Changes per Hour	NCRP	National Council of Radiation Physicists
ADA	Americans with Disabilities Act	NFPA	National Fire Protection Association
AFF	Above Finished Floor	NSF	Net Square Feet
AI	Acquisition and Installation	NSM	Net Square Meters
A&MM	Acquisitions and Material Management	OSD	Open Site Drain
AR	As Required	PCP	Portland Cement Plaster
AT	Acoustical Ceiling Tile	PH	Phase
C	Degrees Celsius	PL	Plaster
CC	Contractor Furnished and Installed, Construction Funds	PREP	Preparation
CF	Construction Funds, VA Furnished, Installed by VA or Contractor	PSIG	Pounds per Square Inch Gauge
CFM	Cubic Feet per Minute	QT	Quarry Tile
CLG	Ceiling	RB	Resilient Base
CM	Construction Management Office	SC	Special Coating (High Build Glazed Coating)
CMU	Concrete Masonry Unit	SD	Standard Detail
CP	Carpet (without cushion broadloom)	SF	Square Feet, Square Foot
CS	Construction Standard	SPD	Supply, Processing, and Distribution
CT	Ceramic Tile	SOPC	Satellite Outpatient Clinic
DISC SW	Disconnect Switch	SS	Stainless Steel
EtO	Ethylene Oxide Gas	TELEC	Telecommunications
EXH	Exhaust	UFAS	Uniform Federal Accessibility Standards
F	Degrees Fahrenheit	V	Volts
FC	Foot-candle	VA	Department of Veterans Affairs
FD	Floor Drain	VACO	Veterans Affairs Central Office
FIXT	Fixture	VAMC	Veterans Affairs Medical Center
FLUOR	Fluorescent	VC	VA Furnished and Contractor Installed - Medical Care Appropriation for Equipment and Construction Appropriations for Installation
HAC	Housekeeping Aids Closet	VCT	Vinyl Composition Tile
HB	Hosebib	VHA	Veterans Health Administration
HVAC	Heating, Ventilation, and Air Conditioning	VV	VA Furnished and Installed-VHA Appropriation
HP	Horsepower	W	Watts
HR	Hour	W/SF	Watts per Square Feet
ICU	Intensive Care Unit		
KW	Kilowatt		
LB	Pound/Pounds		
LLTS	Lounge, Lockers, Toilets, and Showers		
MCS	Master Construction Specifications		
MTD	Mounted		

Legend of Symbols

System	Description of Symbol	Gr. Symbol
Power Receptacles	DUPLEX RECEPTACLE, NEMA 5-20R - 20 AMP - MOUNTED 18" AFF UNLESS OTHERWISE NOTED	
	DUPLEX RECEPTACLE, NEMA 5-20R - 20 AMP - MOUNTED ABOVE COUNTER TOP	
	DUPLEX RECEPTACLE WITH GROUND FAULT INTERRUPTER, NEMA 5-20R - 20 AMP - MOUNTED 18" AFF UNLESS OTHERWISE NOTED	
	DUPLEX RECEPTACLE WITH GROUND FAULT INTERRUPTER, NEMA 5-20R - 20 AMP - MOUNTED ABOVE COUNTER TOP	
	WEATHERPROOF DUPLEX RECEPTACLE WITH GFI, NEMA 5-20R - 20 AMP - MOUNTED 18" AFF UNLESS OTHERWISE NOTED	
	QUADRAPLEX OUTLET, NEMA 5-20R - 20 AMP - MOUNTED 18" AFF OR QUADRAPLEX OUTLET, NEMA 5-20R - 20 AMP - PEDESTAL-MOUNTED	
	QUADRAPLEX OUTLET, NEMA 5-20R - 20 AMP - MOUNTED ABOVE COUNTER TOP	
	QUADRADUPLEX OUTLET WITH GROUND FAULT INTERRUPTER, NEMA 5-20R - 20 AMP - MOUNTED 18" AFF UNLESS OTHERWISE NOTED	
	QUADRADUPLEX OUTLET WITH GROUND FAULT INTERRUPTER, NEMA 5-20R - 20 AMP - MOUNTED ABOVE COUNTER TOP	
	DUPLEX RECEPTACLE, NEMA 5-20R - 20 AMP - EMERGENCY POWER - MOUNTED 18" AFF UNLESS OTHERWISE NOTED	
	QUADRAPLEX RECEPTACLE, NEMA 5-20R - 20 AMP - EMERGENCY POWER	
	SPECIAL RECEPTACLE	
	TELEVISION OUTLET	
	ELECTRICAL STRIP MOLD - NEMA 5-20R RECEPTACLES AT 2"-0" INTERVALS	
	BATTERY POWERED CLOCK	
CIRCUIT BREAKER		

Legend of Symbols (cont.)

System	Description of Symbol	Gr. Symbol
Switches	SINGLE POLE SWITCH	
	SINGLE POLE SWITCH - SUFFIX OF "a", "b", OR "c" INDICATES SEPARATE CONTROL OF FIXTURE(S) WITH SAME DESIGNATION	
	DIMMER SWITCH	
	THREE-WAY SWITCH	
	DOOR SWITCH	
	FUSED OR UNFUSED DISCONNECT SWITCH	
	EMERGENCY POWER OFF (EPO) PUSH BUTTON	
Lighting	2' x 2' FLUORESCENT FIXTURE	
	1' x 4' FLUORESCENT FIXTURE	
	2' x 4' FLUORESCENT FIXTURE	
	WALL-MOUNTED FLUORESCENT FIXTURE	
	2' x 2' FLUORESCENT FIXTURE - EMERGENCY POWER	
	2' x 4' FLUORESCENT FIXTURE - EMERGENCY POWER	
	WALL-MOUNTED FLUORESCENT FIXTURE - EMERGENCY POWER	
	WALL MOUNTED LIGHT FIXTURE - TYPE AS NOTED	
	LIGHT FIXTURE - TYPE AS NOTED	

Legend of Symbols (cont.)

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Revised 10/96

System	Description of Symbol	Gr. Symbol
Communi- cations	TELEPHONE OUTLET - MOUNTED 18" AFF UNLESS OTHERWISE NOTED	
	WALL-MOUNTED TELEPHONE OUTLET - MOUNTED 48" AFF UNLESS OTHERWISE NOTED	
	COMPUTER TERMINAL OUTLET - VERIFY EXACT NEEDS - PROVIDE SIGNAL AND POWER OUTLET AS REQ'D	
	SPEAKER - CEILING-MOUNTED	
	INTERCOM OUTLET	
	NURSE CALL DOME LIGHT - CEILING-MOUNTED	
	NURSE CALL DOME LIGHT - WALL-MOUNTED	
	NURSE CALL DUTY STATION	
	EMERGENCY NURSE CALL	
	NURSE CALL STAFF STATION	
	VOLUME CONTROL - WALL MOUNTED	
Sp. Outlets	JUNCTION BOX - PURPOSE AND LOCATION AS NOTED	
Mechanical	SUPPLY AIR DIFFUSER	
	EXHAUST AIR REGISTER OR GRILLE	
	THERMOSTAT	
Plumbing	COMBINATION FAUCET HOSE BIBB	
	MEDICAL GAS OUTLET	