



Department of
Veterans Affairs

Office of Construction & Facilities Management

designguide

February 2010

SUPPLY PROCESSING & DISTRIBUTION

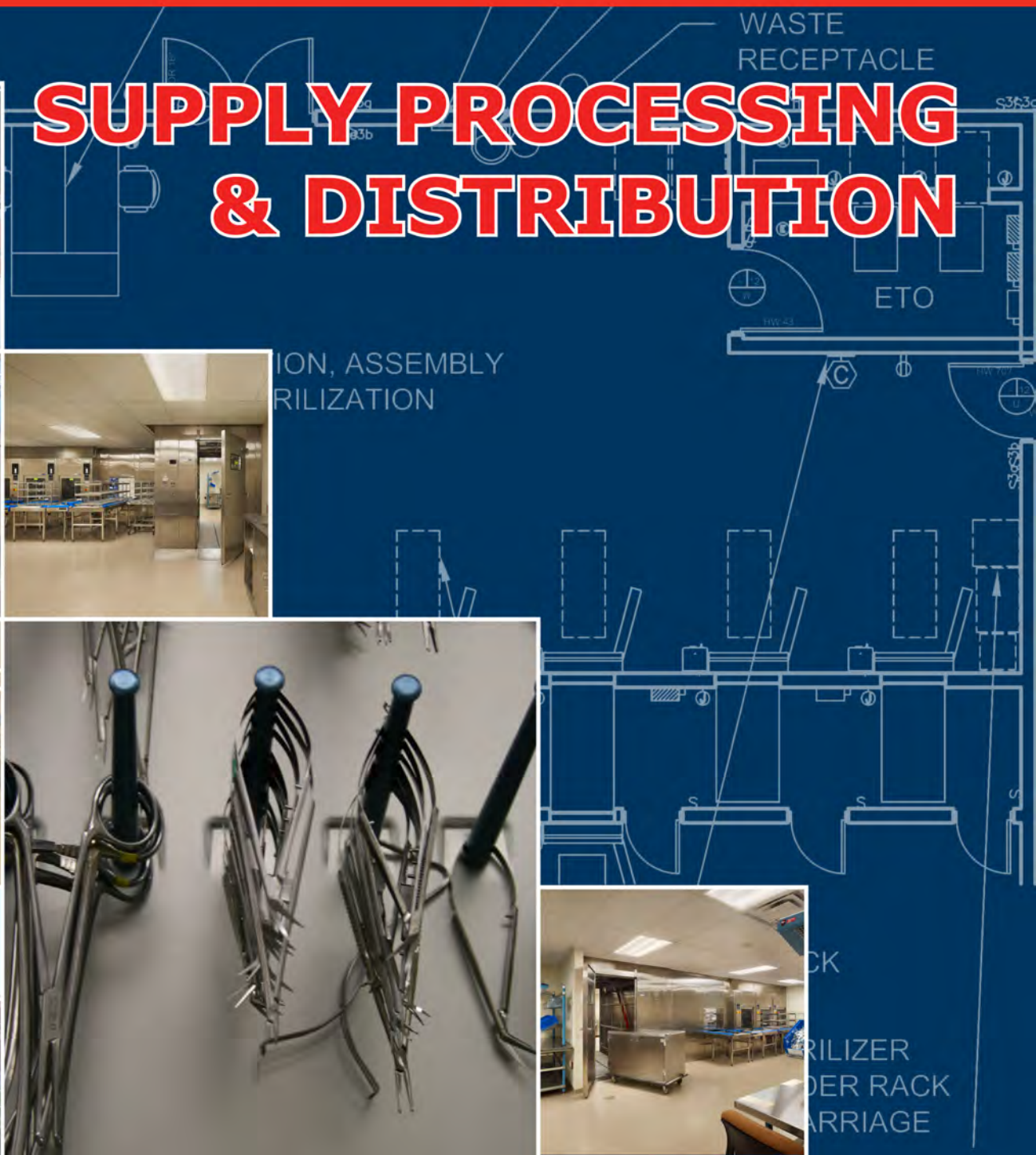
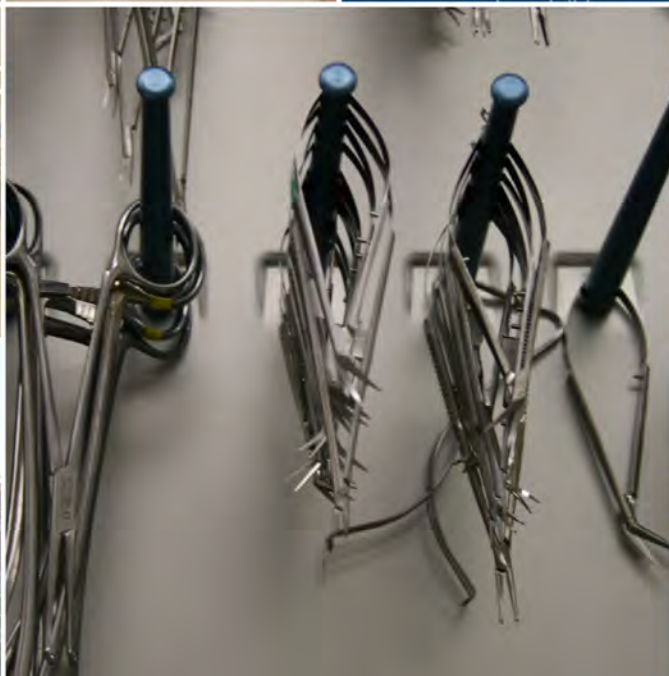




TABLE OF CONTENTS

Section 1	Foreword & Acknowledgments Introduction Abbreviations Legend of Symbols
Section 2	Narrative General Considerations Technical Considerations Architectural Considerations Engineering Considerations Concerns Specific to Supply, Processing & Distribution
Section 3	Functional Diagrams Relationship Diagrams and Generic Layout
Section 4	Guide Plates (typical order) Floor Plan Reflected Ceiling Plan Design Standards Equipment Guide List
Section 5	Appendix Glossary of Terms SEPS / Cross-Reference Guide Plate Index

This page intentionally left blank.

Section 1

Foreword & Acknowledgements

	Page
Foreword.....	1-1
Acknowledgements.....	1-3
Introduction.....	1-5
Abbreviations.....	1-7
Legend of Symbols.....	1-9



This page intentionally left blank.

Foreword

The material contained in the Supply, Processing & Distribution Department Design Guide is the culmination of a partnering effort within the Department of Veterans Affairs by the Veterans Health Administration and the Office of Construction & Facilities Management, Strategic Management Office. The goal of this Design Guide is to facilitate 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 Supply, Processing & Distribution Departments. The Design Guide is not to be used as a standard design. Use of the Design Guide does not preclude the need for a functional and physical design program for each specific project. It is the responsibility of the Project Architect and the Project Engineer to develop a complete and accurate project design that best meets the user's needs and applicable code requirements.

Lloyd H. Siegel, FAIA
Director, Strategic Management Office
Office of Construction & Facilities Management
Washington, DC

This page intentionally left blank.

Acknowledgements

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

Office of Construction & Facilities Management

Donald H. Orndoff	Director, Office of Construction & Facilities Management
Lloyd H. Siegel, FAIA	Director, Strategic Management Office
Kurt Knight, PE	Chief, Facilities Quality Service, FQS
Donald L. Myers, AIA, NCARB	Senior Architect, Consulting Support Service
Satish Sehgal, PE	Senior Mechanical Engineer, FQS
Mulraj Dhokai, PE	Senior Mechanical Engineer, FQS
Alejandra De La Torre	Architect, Facilities Quality Service

Advisory Group

Bobby Osburn	SPD Executive Program Director
Tommy C. Stewart	Director, Clinical Programs

Consultants

N.K. Bhandari Architecture & Engineering, P.C.

James Resig, PE, LEED® AP

Jennifer Thayer, AIA

Francis Cauffman

Stephen Hegeman, AIA

Catherine Gow, AIA

Sharon Doyle

Gloria Cascarino

Suzanne Campano

Jessica Hawk

Gina DeMatteis

Erin Disbrow

RAM-TECH Engineers, P.C.

Ravi Raman, PE

Tim Myers, PE, LEED® AP

Fred Sanczawa, PE

This page intentionally left blank.

Introduction

The Supply, Processing, & Distribution Department Design Guide 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 Supply, Processing, & Distribution (SPD) Departments based in a VA Hospital.

The 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:

- ADA Standards for Accessible Design
- International Building Code, 2006
- NFPA 101
- Barrier-Free Design Guide PG-18-13
- Design and Construction Procedures PG-18-3
- Equipment Guide List PG-18-5
- Equipment Reference Manual PG-18-6
- Fire Protection Design Manual
- Master Construction Specifications PG-18-1
- National CAD Standards and Details PG-18-4
- Physical Security Design Manual (Final Draft)
- Room Finishes, Door Hardware Schedules PG-18-14
- Seismic Design Requirements H-18-8
- Signage Design Guide
- Space Planning Criteria for VA Facilities
- Sustainable Design and Energy Reduction Manual (Final Draft)
- VA Technical Criteria (PG-18-10 Design Manuals) pertaining to Architectural, Interior Design, HVAC, Plumbing, and Electrical
- 2006 AIA Guidelines for Design and Construction of Health Care Facilities
- HVAC Design Manual for Hospital Projects
- Emergency Power & Water Supply During Natural Disasters, Phase 2
- Energy Conservation (EPACT 2005 and DOE – Final Rule)
- Energy Conservation (Executive Order No. 13423 Dated January 24, 2007: Strengthening Federal Environmental, Energy and Transportation Management)
- Memorandum of Understanding (MOU): Federal Leadership in High Performance and Sustainable Buildings.
- Commissioning Guidelines (issuance pending)

The Design Guide refers to the above mentioned sources when data is either too detailed or too broad to be included in this guide. These sources can be accessed at www.cfm.va.gov/til.

This Design Guide is not intended to be project-specific. It addresses the general functional and technical requirements for typical VA SPD Departments. While this Guide contains information for the vast majority of space types required in an SPD Department, 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 in Section 4 are generic graphic

representations intended as illustrations of VA's furniture, equipment, and personnel space needs. They are not meant to limit design opportunities.

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

Abbreviations

A	Amperes
ABA	American Barriers Act
AC/HR	Air Changes per Hour
ADA	Americans with Disabilities Act
AFF	Above Finished Floor
AI	Acquisition and Installation
AIDS	Acquired Immune Deficiency Syndrome
A & MM	Acquisition and Material Management
AR	As Required
AT	Acoustical Ceiling Tile
AT (SP)	Acoustical Ceiling Tile (with Sprayed Plastic Finish)
BC	Base Cabinet
C	Degrees Celsius
CB	Circuit Breaker
CBOC	Community Based Outpatient Clinic
CC	Contractor Furnished Contractor Installed
CF	Construction Funds – For VA Furnishing of Equipment and/or Installation
CFM	Cubic Feet per Minute
CLG	Ceiling
OCFM	Office of Construction & Facilities Management
CMU	Concrete Masonry Unit
CPT	Carpet Tile
CRS	Corrosion Resisting Steel (SS)
CS	Construction Standard
CT	Ceramic Tile
CT	Computerized Tomography
DG	Design Guide
DS	Door Switch
EMS	Environmental Management Service
ER	Emergency Room
ETM	Exam Treatment Module
EtO	Ethylene Oxide Gas
EXH	Exhaust
F	Degrees Fahrenheit

FC	Foot-candle
FD	Floor Drain
FIXT	Fixture
FLUOR	Fluorescent
GFI	Ground Fault Circuit Interrupter
GWB	Gypsum Wallboard Systems
HAC	Housekeeping Aides Closet
HIV	Human Immunodeficiency Virus
HP	Horsepower
HR	Hour
HVAC	Heating, Ventilating, and Air Conditioning
ICU	Intensive Care Unit
K	Kelvin
KW	Kilowatt
LB	Pound/Pounds
LLTS	Lockers, Lounges, Toilets & Showers
MCS	Master Construction Specifications
MOHS	Moh's Chemosurgery
MTDD	Mounted
NA	Not Procured with Activation Funds
NSF	Net Square Feet
NSM	Net Square Meters
OSD	Open Site Drain
P	Paint (Exterior and Interior; Transparent, Semi-Transparent, and Opaque Finishes)
PACS	Picture Archiving and Communication System
PCP	Portland Cement Plaster
PEC	Primary Engineering Control
PG	Program Guide
PH	Phase
PL	Plaster
PPE	Personal Protective Equipment
PREP	Preparation
PT	Porcelain Tile (Floor and Base)


























PSIG	Pounds per Square Inch Gauge
QT	Quarry Tile
RB	Resilient Base
RES	Resinous Flooring
RES-W	Resinous/ Epoxy Wall/ Ceiling
RSF	Resilient Sheet Flooring
SC	High Build Glazed Coating (Special Coating)
SD	Standard Detail
SF	Square Feet, Square Foot
SOPC	Satellite Outpatient Clinic
SP	Special Faced
SPD	Supply, Processing and Distribution
SVT	Solid Vinyl Floor Tile (Luxury Vinyl Tile)
SRC	Semi-Restricted Corridor
SS	Stainless Steel
TELEC	Telecommunications

UC	Urgent Care
UFAS	Uniform Federal Accessibility Standards
UPS	Uninterruptible Power Supply
V	Volts
VA	Department of Veterans Affairs
VACO	Veterans Affairs Central Office
VAMC	Veterans Affairs Medical Center
VC	VA Furnished Contractor Installed
VCT	Vinyl Composition Tile
VHA	Veterans Health Administration
VV	VA Furnished and Installed Medical Care Application for Equipment and Installation
W	Watts
WSF	Welded Seamless Flooring (Heat Welded with Rod)
W/SF	Watts per Square Foot
W/m ²	Watts per Square Meter

Legend of Symbols

SYSTEM	DESCRIPTION OF SYMBOLS	SYMBOLS
Wiring devices And Power	Duplex receptacle, NEMA 5-20R, 20 amp, mounted 18" (450mm) AFF unless otherwise noted	
	Duplex receptacle, NEMA 5-20R, 20 amp, mounted 3" (75mm) above counter top/counter top back splash	
	Duplex receptacle with ground fault interrupter, NEMA 5-20R, 20 amp, mounted 18" (450mm) AFF unless otherwise noted	
	Duplex receptacle with ground fault interrupter, NEMA 5-20R, 20 amp, mounted 3" (75mm) above counter top/counter top back splash	
	Weatherproof while in use duplex receptacle with GFI, NEMA 5-20R, 20 amp, mounted 18" (450mm) AFF unless otherwise noted	
	Quadruplex outlet, NEMA 5-20R, 20 amp, mounted 18" (450mm) AFF unless otherwise noted	
	Quadruplex outlet, NEMA 5-20R, 20 amp, mounted 3" (75mm) above counter top/counter top back splash	
	Quadruplex outlet with ground fault interrupter, NEMA 5-20R, 20 amp, mounted 18" (450mm) AFF unless otherwise noted	
	Quadruplex outlet with ground fault interrupter, NEMA 5-20R, 20 amp, mounted 3" (75mm) above counter top/counter top back splash	
	Duplex receptacle on emergency power, NEMA 5-20R, 20 amp, mounted 18" (450mm) AFF unless otherwise noted	
	Duplex receptacle on emergency power, NEMA 5-20R, 20 amp, mounted 3" (75mm) above counter top/counter top back splash	
	Duplex receptacle with ground fault interrupter on emergency power, NEMA 5-20R, 20 amp, mounted 18" (450mm) AFF unless otherwise noted	
	Duplex receptacle with ground fault interrupter on emergency power, NEMA 5-20R, 20 amp, mounted 3" (75mm) above counter top/counter top back splash	
	Weatherproof while in use duplex receptacle with ground fault interrupter on emergency power, NEMA 5-20R, 20 amp, mounted 18" (450mm) AFF unless otherwise noted	
	Quadruplex receptacle, NEMA 5-20R, 20 amp, emergency power, mounted 18" (450mm) AFF unless otherwise noted	
	Quadruplex receptacle with ground fault interrupter on emergency power, NEMA 5-20R, 20 amp, mounted 18" (450mm) AFF unless otherwise noted	
	Special receptacle of the type required, mounted 18" (450mm) AFF unless otherwise noted	
Special receptacle of the type required on emergency power, mounted 18" (450mm) AFF unless otherwise noted		

Legend of Symbols

SYSTEM	DESCRIPTION OF SYMBOLS	SYMBOLS
Wiring devices And Power	Electrical surface mounted multi-outlet raceway assembly, NEMA 5-20R receptacles at 2'-0" (600mm) intervals, single or multiple channel as required, mounted 12" (300mm) above counter	
	Emergency Power Off (EPO) push button, mounted 40" (1000mm) AFF	
	Ceiling Junction box, purpose and location as noted	
	Junction box in wall, purpose and location as noted, mounted 18" (450mm) AFF unless otherwise noted	
	Circuit Breaker, mounted 60" (1500mm) AFF	
	Disconnect switch on normal power	
	Disconnect switch on emergency power	
	Single pole switch, mounted 46" (1150mm) AFF	
	Single pole switch, suffix of "a", "b", or "c" indicates separate control of fixture(s) with same letter designation - mounted 46" (1150mm) AFF	
	Dual switch, for inboard/outboard lamping control – mounted 46" (1150mm) AFF	
	Three-way switch, mounted 46" (1150mm) AFF	
	Four-way switch, mounted 46" (1150mm) AFF	
	Occupancy sensor, dual technology, wall mounted 46" (1150mm) AFF	
Occupancy sensor, dual technology, ceiling mounted		
Lighting Fixtures	Suffix of "a", "b", or "c" on light fixture indicates separate control of fixture(s) on light switch with same letter designation.	
	2'x4' (600 mm x 1200 mm) recessed, grid mounted fluorescent light fixture, UL listed for wet location, prismatic lens with gasketing, w/ F32T8 lamps, 3500°K, CRI=70 (minimum).	
	2'x4' (600 mm x 1200 mm) recessed, grid mounted fluorescent light fixture on emergency power, UL listed for wet location, prismatic lens with gasketing, w/ F32T8 lamps, 3500°K, CRI=70 (minimum).	
	2'x4' (600 mm x 1200 mm) recessed, flange mounted fluorescent light fixture, UL listed for wet location, prismatic lens with gasketing, w/ F32T8 lamps, 3500°K, CRI=70 (minimum).	
	2'x4' (600 mm x 1200 mm) recessed, flange mounted fluorescent light fixture on emergency power, UL listed for wet location, prismatic lens with gasketing, w/ F32T8 lamps, 3500°K, CRI=70 (minimum).	
	1'x4' (300 mm x 1200 mm) recessed, flange mounted fluorescent light fixture, UL listed for wet location, prismatic lens with gasketing, w/ F32T8 lamps 3500°K, CRI=70 (minimum).	
	1'x4' (300 mm x 1200 mm) recessed, flange mounted fluorescent light fixture on emergency power, UL listed for wet location, prismatic lens with gasketing, w/ F32T8 lamps 3500°K, CRI=70 (minimum).	
	2'x2' (600 mm x 600 mm) recessed, grid mounted fluorescent light fixture, direct/indirect w/gasketed acrylic diffuser and lens, w/ F32T8 lamps 3500°K, CRI=70 (minimum).	
	2'x2' (600 mm x 600 mm) recessed, grid mounted fluorescent light fixture on emergency power, direct/indirect w/gasketed acrylic diffuser and lens, w/ F32T8 lamps 3500°K, CRI=70 (minimum).	
	24" Wall mounted fluorescent fixture - mounted 92" (2300mm) AAF unless otherwise noted, prismatic acrylic shield, w/ F17T8 lamps, 3500°K, CRI=70 (minimum).	
	24" Wall mounted fluorescent fixture on emergency power - mounted 92" (2300mm) AAF unless otherwise noted, prismatic acrylic shield, w/ F17T8 lamps, 3500°K, CRI=70 (minimum).	

Legend of Symbols

SYSTEM	DESCRIPTION OF SYMBOLS	SYMBOLS
Ceilings	2 x 2 Acoustical Ceiling Grid	
	RES-W/ GWB (SC)*	
	AT (SP)*	
	No finish ceiling	
Auxiliary Systems	Telephone/data outlet – mounted 18" (450mm) AFF unless otherwise noted	
	Telephone/data outlet – mounted 3" (75mm) above counter top/counter top back splash	
	Telephone outlet – mounted 18" (450mm) AFF unless otherwise noted	
	Wall-mounted telephone outlet – mounted 48" (1200mm) AFF unless otherwise noted	
	Data outlet – mounted 18" (450mm) AFF unless otherwise noted	
	Video outlet type as noted in equipment list – mounted 18" (450mm) AFF unless otherwise noted	
	Wall clock - battery powered	
	Public address speaker – ceiling mounted	
	Public address speaker – wall mounted	
	Intercom station – wall mounted (empty conduit)	
Mechanical	Room thermostat - mounted 5'-0" (1520mm) AFF	
	Room humidistat – mounted 5'-0" (1520mm) AFF	
	Room pressurization monitor - mounted 8'-0" (2400mm) AFF unless noted otherwise	
	Room ethylene oxide sensor - mounted 7'-0" (2100mm) unless noted otherwise	
	Exhaust air register	
	Supply air diffuser	
Plumbing	Laboratory gas outlet (letter designates service), mounted 48" AFF unless otherwise noted	
	Quick Response Concealed Sprinkler Head	
	Quick Response Upright Sprinkler Head With Guard	

This page intentionally left blank.

Section 2

Narrative

	Page
General Considerations.....	2-1
Technical Considerations.....	2-3
Architectural Considerations.....	2-5
Engineering Considerations.....	2-11
Concerns Specific to Supply, Processing & Distribution.....	2-15



This page intentionally left blank.

General Considerations

General Planning Concepts

Flow with Sequence: Supply, Processing, and Distribution (SPD) are organizationally aligned under the Nurse Executive/Chief Nurse. The mission of SPD is to provide a steady flow of patient care supplies and equipment to points of need, and to return contaminated items to a central decontamination area for cleaning.

SPD is the first line of defense against harmful microorganisms. Contamination prevention is achieved by closely monitoring the following elements:

Air Flow: To minimize microorganism movement from dirty to clean areas. In clean areas there is a positive air flow.

Staff Flow: Personnel work either on the clean side or the dirty side of the SPD unit to avoid cross contamination.

Work Flow: Refers to the movement of clean (sterile) supplies and the return of contaminated items for decontamination and sterilization.

Adjacencies: SPD must be closely affiliated with surgical procedure suites. SPD may be directly connected to the sterile support core for the Surgical Suite, or may be located with convenient and direct access via cart lifts and/or staff circulation.

Processing and Distribution Methods

SPD is divided into three main units/areas. The first unit is Decontamination, where all reusable medical and surgical items are sent for cleaning. It is essential that contaminated materials do not use the same path as the clean materials. The second unit is Preparation. In this unit, items are inspected and packaged for sterilization. Most sterilization is accomplished by using steam; or, in the case of materials that cannot withstand intense temperatures, ethylene oxide (EtO) gas (or another suitable gas) is used. Materials undergoing EtO sterilization must be adequately aerated to ensure that no hazardous traces are left on devices. The final unit in SPD involves the Distribution Process, including distributing surgical case carts. This unit is further subdivided into Primary Stock and Secondary Stock. Primary Stock refers to the supplies that are stored within the confines of the SPD department. Secondary Stock materials are those in user areas such as clinics, nursing care units, and intensive care units.

Current Trends

A current trend impacting SPD is the increasing complexity of many surgical procedures such as laparoscopy, endoscopy, laser, micro-vascular, and more complex surgeries. These complicated surgeries require more complicated instrumentation. This complex instrumentation has led to the trend for SPD technicians to be certified, thus requiring the staff to have a certain level of competency and to keep up with periodic/annual continuing education.

Another current trend in SPD is instrument tracking. This can eliminate hours of searching for lost instruments, location of key assets, tracking loaner equipment, and ensuring patient safety and the quest for zero “never events” through the validation of sterilization processes.

Future SPD Trends

An anticipated future SPD trend, sustainable decontamination and sterilization equipment has been embraced by many manufacturers who are reviewing the environmental impact of the product lines, and developing machines that are safer for the staff and kinder to the environment. Examples include equipment features that yield significant water savings, the use of fewer toxic or less-toxic chemicals, etc.

Other future trends include stricter protection of healthcare workers, since pathogenic organisms (Hepatitis B or C, and Human Immunodeficiency Virus (HIV)) have become known.

Special Considerations

EtO: The provision of ethylene oxide (EtO) gas (or another suitable gas) may be required to sterilize selected instrumentation that is unable to sustain the high heat of steam-based sterilization processing. Because of the high toxicity of the sterilizing agent used in this process, EtO sterilization must be sustained in a fully contained room that is part of the Prep, Assembly, and Sterilization space.

Location of Bulk Storage: Bulk storage is where supplies are received in case lots from the warehouse, prime vendor and other sources. The Bulk Storage should be located near the SPD Clean/Sterile Storage area and connected to the SPD Breakout. No supplies are to be in this area; low unit of measure. (Note: Hospital sterilized items, including instrument sets, will not enter this area.)

Endoscope Processing: Endoscopes may be rigid or flexible. Rigid Endoscopes are typically sterilized with the same vigor and care as the surgical instrumentation. Flexible Endoscopes typically require minimum high-level disinfection and occur in close proximity to where the procedure is performed (i.e., GI Suite). However, some SPD suites may need to accommodate the reprocessing of Flexible Endoscopes. This will require dedicated Endoscope Reprocessors.

Technical Considerations

Natural Disasters

Hurricanes, tornados, earthquakes, and floods are natural phenomena that occur within regional areas of designated probability. Design solutions should address these probabilities where they occur to mitigate building damage and loss of life wherever possible. Selection of building sites should avoid flood plains or flood prone areas. Regional areas susceptible to hurricanes should incorporate design features that mitigate damage associated with high winds, wind-driven rain and projectiles. Tornado design mitigation is similar to hurricanes; however, much more localized and intensive in nature. Buildings in areas with probability of earthquakes need to be seismically restrained in accordance with H-18-8 Seismic Design Requirements.

Because of its critical mission in supporting surgical procedures, the SPD should be planned to allow as continuous an operation as possible during and immediately after natural disasters.

Interior Materials, Finishes and Doors

The interior materials, finishes and doors shall follow guidance in PG-18-10, Architectural Design Manual and PG-18-14, Room Finishes, Door and Hardware Schedule. The Guide Plate for each space includes a listing of design criteria applicable to that space.

Contemporary Advancements/Evidence Based Design

Accessibility: Accessibility is accommodated by the application of PG 18-13, VA Barrier Free Design Guide; Architectural Barriers Act Accessibility standards (ABAAS), Appendices C and D to 36 CFR, and ADA Standards for Accessible Design (28 CFR part 36) to space and fixed equipment layouts.

This page intentionally left blank.

Architectural Considerations

Location of SPD

Several factors influence the location of the SPD. These include:

Access to the OR: In some circumstances, the sterile delivery side of the SPD can be directly linked with a sterile core of the OR, allowing a direct transfer of materials and instrumentation and minimizing transport time.

As an alternative, the SPD can be located on another level. The SPD may be linked via clean and soiled cart lifts. Dedicated clean and soiled cart lifts need to arrive and leave at appropriate locations within the SPD, and cannot be used for any other function, nor can a single lift be used for both clean and soiled transport. Clean and soiled dumbwaiters may be an alternative, but are not an ideal solution in new construction as they require the transfer of items onto the dumbwaiter, then off at the point of destination, while the cart lift allows for the transport of a fully loaded cart.

Access to Loading Dock: The SPD receives fresh supplies to store, inventory, and distribute to augment instrumentation that is then used to stock supply or case carts. Access to the loading dock needs to be straightforward and simple to allow the repeated and consistent delivery of material. If the loading dock is on a different level of the facility, care must be taken to plan the entire route from the dock to the SPD, confirming corridor width, elevator size, etc.

Environmental Requirements

Environmental considerations most critical to SPD are: temperature, humidity, ventilation, light, and protection from contaminants.

Facility design is crucial to the efficiency and effectiveness with which these needed environmental conditions are met. Design features deserving particular attention include:

- Separation of soiled areas from clean areas
- Restricted areas
- Containment area for EtO gas
- Heating, ventilation, and air conditioning (HVAC Systems)
- Room relationships (regarding function and staff utilization)
- Modularity of design/flexibility
- Interior surfaces and finishes

Space Planning Criteria

Space planning criteria for SPD includes the following considerations:

Quantity of Space: The quantity of space will be driven by the total through-put needs of the SPD, which is, in turn, driven by the surgical volumes and surgical procedure mix. Key factors in determining total size will be the total number of sterilizers needed and the total daily through-put of instrumentation carts. The relationship between surgical volumes and SPD through-put is direct; if the ORs are planned to expand, the SPD needs to have correlative capacity.

Location of Space: The relationship between SPD and the OR Suites is critical, as previously noted. In addition, a clear path from loading docks to the SPD is essential.

Quality of Space: The space itself must be able to provide an appropriately clean environment for the handling of soiled instrumentation and sterile instrumentation and supplies. Mechanical, electrical, and plumbing requirements are defined under "Engineering Considerations". In addition, finishes must respond to the need to be able to clean the environment appropriately.

Room Relationships & Adjacencies

One of the primary purposes of the SPD is to deliver clean/sterile supplies and instrumentation to the OR. It does so by receiving and cleaning soiled instrumentation and by staging and assembling sterile instrumentation and clean/sterile supplies for delivery to surgical sites and other areas that require sterile implementation within the hospital. In doing so, it must promote efficient delivery of material while maintaining the clean and sterile status of instrumentation and supplies. The four key spaces are sequentially linked, and include:

Decontamination: Soiled instrumentation arrives here as the first stage in the SPD process. Soiled instrumentation is received via closed case carts that may return via elevators, dedicated cart lifts, or dumbwaiters directly to the Soiled Receiving and Decontamination Room.

Preparation, Assembly, and Sterilization Area: This room is directly connected to Decontamination. Equipment passes through a washer decontaminator that allows the transfer of instrumentation through the washer/disinfector or sterilizer to the Preparation, Assembly, and Sterilization Area. Access for sterilizer maintenance must be provided, and there may be a pass-through window for small items.

Clean and Sterile Storage: This room is directly connected to the Prep, Assembly, and Sterilization Room and is used to store and pick sterilized instrumentation and sterile supplies for delivery to the point of use.

Staff Support: These spaces serve to provide administrative and break support for SPD staff.

It is critical to the functional efficiency and safety of the SPD that these spaces are sequentially linked for one-way flow-through of instrumentation and carts. This promotes the maintaining of the sterile state of instrumentation as it is cleaned for re-use.

Functions of Areas within SPD

Clean Receiving and Breakout Area: This space serves as an area to receive and break out disposable supplies received from the warehouse, prime vendor, or manufacturers. This area is also where specialty carts such as crash/code carts and isolation carts are returned after use for the supplies to be removed before the empty cart is taken to the Decontamination Area for cleaning. This area is also used to receive loaner instruments and equipment and for them to be picked up. Consignment supplies and implants are to be received here, as well.

Anteroom: This space serves to maintain proper air pressure relationships when personnel move between adjacent spaces.

Decontamination Area: This includes staging space and circulation space designed to allow for the gross decontamination of instrumentation, followed by the placement of the instrumentation on a washer decontaminator that will deliver clean instrumentation to the Prep, Assembly, and Sterilization Room. In addition, there is a pass-through window for selected items that are either too delicate or will not fit will be directed to the EtO Sterilizer in the Prep, Assembly, and Sterilization room.

Automatic Cart Washer: This room houses the equipment that receives soiled carts, washes them, and delivers them to the Clean and Sterile Storage Room.

Detergent/Water Treatment Room: Supports the washer disinfectors, sterilizers, and cart washers.

Decontamination HAC: In order to maintain clarity of cleanliness, the Decontamination Area has a dedicated Housekeeping Aide's Closet, accessed only from the Decontamination Area and used only for cleaning in that space

Staff Lockers/Showers: One-way flow-through staff lockers are provided to ensure that Decontamination staff arrive, dress and work within the Decontamination area without cross-contaminating other spaces or public corridors. Separate lockers are to be provided for staff working in the Prep, Assembly, and Clean/Sterile Storage Rooms.

Manual Equipment Washer Room: Space for manual cleaning of reusable equipment.

Soiled Cart Lift: If a lift is used for the movement of soiled carts, the soiled cart lift must deliver the soiled cart directly to the Decontamination area. Soiled carts must be restricted to the soiled cart lift.

Clean Cart Lift: If a lift is used for the movement of clean carts, the clean cart lift must deliver the clean cart directly to the Surgery suite sterile storage space. Clean carts must be restricted to the clean cart lift.

Prep, Assembly, and Sterilization: This room preps, assembles, and sterilizes equipment and instrumentation. Instrumentation arrives through-wall washer/sterilizers or sterilizers; other

selected items may arrive via a window pass-through. The room decants prepped and packed sterilized instruments into the Clean/Sterile Storage Room. As part of its function, the Prep, Assembly, and Sterilization Room has an EtO Sterilizer, used for devices that cannot withstand steam sterilization due to temperature or moisture.

Clean/Sterile Storage: This room contains a number of functions that support the staging and storage of clean and sterile supplies for distribution to point of service. Those functional zones include:

Case Cart Holding: This area is positioned immediately adjacent to the delivery door from Prep, Assembly, and Sterilization to facilitate the assembly of case carts with specific sterile packs for case carts.

Equipment Storage and Testing: This area, positioned to receive cleaned carts and cleaned medical equipment, accommodates the testing and storage of equipment and the temporary queuing of carts.

Case Cart Area: This area stores and stocks clean supply dedicated for OR use. These supplies have been broken out to accommodate final stocking on case carts or other dedicated cart delivery systems.

Dispatch/Control: These workstations accommodate staff that direct the flow of case carts and cleaned/tested equipment to point of use.

In addition, there are several rooms that have a direct relationship to Clean/Sterile Holding with all of its work zones. These include:

Receiving and Breakout Room: This room allows for the arrival of clean supplies and the breaking out of those supplies from shipping cartons and boxes. Packing debris should be removed without entering the Clean/Sterile Holding Room. Space for inventory management is provided in this space.

Bulk Storage: This room allows for the queuing of the storage Receiving and Breakout Room prior to unpacking and stocking shelving in the Clean/Sterile Storage Room.

Staff Lockers: Dedicated lockers and a toilet are provided for staff working within the Prep, Assembly, and Sterilization Room and the Clean/Sterile Supply Storage Area. This dedicated one-way flow through locker room is designed to promote the maintenance of the clean environment in both major rooms.

Support Spaces: There are several functions that support the core mission of the SPD. These include:

Staff Break Room/Conference Room: The Staff Break Room/Conference Room is designed to serve staff working with the SPD. Staff using this Break Room/Conference Room must return to their respective worksites with attention to cleaning and gowning protocols suitable for each key space.

Administrative Space: Three offices are provided for SPD staff. These offices are accessed from the public corridor. As administrative staff move into specific rooms, they must do so through the respective one-way flow-through lockers.

This page intentionally left blank.

Engineering Considerations

Mechanical (Heating, Ventilating, and Air Conditioning)

An adequate heating and ventilating and air conditioning (HVAC) system is a critical element in planning for SPD and requires careful evaluation. Maintenance of space airflows and relative air pressurizations to contain contamination and to maintain clean environments is a critical aspect of the system. The Mechanical Engineer should coordinate with the Architect and equipment specialists in order to accommodate sterilizing equipment specified for the project. Any request for deviation from HVAC design criteria must be approved by the VA and occur no later than the design development stage. The following represents the highlights of the mechanical system design for SPD. Refer to the VA HVAC Design Manual for additional design requirements.

HVAC System: The “clean” portions of the SPD area must be positively pressurized with respect to adjoining areas and the “dirty” portions of the SPD area must be under negative pressure with respect to adjoining areas. Within the SPD, the following relative air pressurizations for each of the spaces listed must be maintained.

1.	Soiled Receiving and Decontamination Room	Negative Air Pressure
2.	Preparation, Assembly & Sterilization Area	Positive Air Pressure
3.	EtO Gas Enclosure	Negative Air Pressure
4.	Steam Sterilizer and Equipment Service Areas	Negative Air Pressure
5.	Preparation and Inspection of Surgical Linens and Packs	Positive Air Pressure
6.	Clean/Sterile Storage	Positive Air Pressure

Separate dedicated exhaust systems should be provided for the following spaces; constant volume exhaust systems are required:

1. EtO Sterilizers (separate dedicated exhaust systems for the room and the sterilizer).
2. Automatic and/or Manual Equipment wash area.
3. General Exhaust of entire SPD Suite, including steam sterilizers equipment areas.

A dedicated 100% outside air handling unit must be provided for the entire SPD Suite. The unit must be constant volume. The unit should include the necessary primary air heating, cooling, humidification, dehumidification, and filtration provisions.

Since air is a very good carrier of contaminating agents, air in the Soiled Receiving and Decontamination unit should never mix with air in the Preparation and Inspection unit. It is imperative that the soiled areas have a negative air pressure and the clean areas have a positive air pressure.

Individual supply air terminals should be provided for individual SPD areas. Supply air terminals should be constant volume type with airflow volume control capability and include a reheat coil. Individual area exhaust air terminals with airflow volume control capability are not mandatory, but should be considered on an ‘as needed’ pressurization control basis.

Reconditioning of the medical and surgical instruments and utensils is dependent upon the temperature and humidity. The Soiled Receiving and Decontamination Area, and the Preparation, Assembly & Sterilization Area should have individual room temperature and humidity controls.

Controls and Monitoring:

- All Suite air systems are to operate continuously in order to maintain room pressurization relationships.
- Provide room pressurization monitors, with alarms, at Preparation Room (relative to the Decontamination Room) and at Clean/Sterile Storage Room (relative to the surrounding corridor) and at Decontamination Room (relative to the surrounding corridor).
- EtO gas release monitors should be placed within the EtO Sterilizer Room and outside of the EtO Sterilizer Room in the Preparation/Pack Room, as a warning system for potential EtO leaks. In addition, each of the EtO exhaust systems should be monitored and alarmed.

Utilities

Equipment: Coordinate all utilities with specified equipment utility requirements.

- Steam Sterilizers
- EtO Sterilizers
- Hydrogen Peroxide Sterilizers
- Washer/Decontaminator
- Cart Washer
- Sonic Cleaner
- Manual Cleaning and Wash Stations

Floor Drains:

Decontamination Room: Locate in vicinity of wash stations and equipment loading/unloading areas. Locate floor drains and slope floor to drain to prevent water from pooling on floor.

Equipment Service Areas: Locate as required for equipment drainage and provide funnel for indirect drainage connection.

Manual Equipment Wash Area: A floor drain for the area should have a minimum 100 mm (4 inch) diameter outlet, and be covered by a grid or strainer. Location of the drain should be at the center of the room with the floor sloping toward the drain at a rate of no less than 3 mm per 25 mm (1/8 inch per foot), and no more than 6 mm per 25 mm (1/4 inch per foot). The floors outside both doors of the Manual Equipment Wash Area should slope back toward the drain.

Non-Patient Medical Air: The use of a medical air system meant for patient care in SPD is not permitted under NFPA 99. An NFPA 99C Level 3 medical air system, separate from any patient care medical air system, should be provided for SPD.

Electrical

Follow criteria as prescribed in PG-18-10, the Electrical and Telecommunication's Design Manual for New Hospitals, Replacement Hospitals, Ambulatory Care, Clinical Additions, Energy Centers, and Outpatient Clinics.

Lighting: Illumination is typically provided utilizing recessed fluorescent luminaires with acrylic prismatic lenses in work flow areas. Recessed fluorescent direct/indirect luminaires may be used in the administrative areas to control glare on monitor screens. Surface mounted fluorescent fixtures may be provided for under cabinet task lighting and above mirrors in restrooms. Attention should be given to selecting fixtures, lamps, and controls that best meet the needs of the SPD staff. The fixtures typically use F32T8 lamps in compliance with the Energy Policy Act (EPACT 2005). Lamps shall have a minimum color rendering index (CRI) of 70 and a color temperature of 3500 degrees Kelvin (K). Lighting is typically controlled by wall mounted switches located at the entrance to the room. Larger spaces may utilize multiple switching by separate switches for illuminating a selected area or multilevel lamping control. The use of occupancy sensors is recommended for administrative areas, restrooms, shower rooms, and locker rooms to help reduce energy consumption

- Use light fixtures rated for wet locations in areas specified on the Guide Plates.
- Lighting load densities should be verified for the actual design, as they may vary depending on the room configuration, fixture types, lamps and ballasts used.
- Serve selected light fixtures from the emergency electrical power system to allow for continued operation during a power outage. For facilities that do not require emergency generators, provide selected light fixtures with battery ballast.

Power: General purpose duplex receptacles are typically provided on each wall in administrative areas and where power is required for given areas of SPD. Multiple outlet assemblies (plugmold) shall be provided in Equipment Testing and Storage and areas that perform equipment testing and battery charging. Dedicated duplex or special receptacles are provided for selected pieces of equipment. Workstations with personal computers (PC's) are typically provided with quadruplex receptacles for the PC, monitor and printer. Junction boxes are provided for equipment requiring a hardwired connection.

Emergency Power: Since ventilation and adequate temperature are integral in the function of SPD, the following mechanical systems must be connected to emergency power system and must remain operational during power outages: Supply Air System, General Exhaust System, Wash Area Exhaust System, EtO Sterilizer Exhaust System, EtO Gas Release Monitors, Steam Sterilizers, and all DDC controls for these systems. Additionally, the chilled water system serving the SPD Supply Air System must be connected to the emergency power system. All sterilization equipment is recommended to be connected to the emergency electrical power system if possible. Steam sterilizers must be connected to the emergency power system. The

emergency electrical power system should be reviewed to determine if sufficient capacity is available for connection of all other sterilizers and other SPD equipment.

Communications/Special Systems

Follow criteria as prescribed in PG-18-10, Electrical and Telecommunication's Design Manual for communications and special systems.

Telephone: Outlets are typically provided in administrative areas and in proximity to workstations at selected locations within the SPD work areas

Automatic Data Processing (ADP): Computer outlets are typically provided at each workstation with a personal computer (PC) and/or a printer.

Intercom: An interdepartmental intercom system should be provided to allow communication between the various departments within the SPD area. Intercom stations should be placed in the Soiled Receiving and Decontamination Area; Preparation, Assembly, and Sterilization Area; and Dispatch Area. Exact locations and quantities of intercom stations should be coordinated with the Chief of SPD.

Public Address: The department should be included as part of the hospital-wide PA system. The public address system is typically part of the telephone system and installation shall be coordinated accordingly. Speakers shall be located in selected areas as determined necessary by the SPD staff.

Life Safety and Fire Protection

As stated in the VA Fire Protection Design Manual, the Public Buildings Amendment Act (PL 100-678) requires all Federal agencies to follow the latest editions of nationally recognized fire and life safety codes. VA has adopted the National Fire Codes (NFC), except NFPA 5000, published by the National Fire Protection Association (NFPA). Life safety requirements are specifically addressed in the Life Safety Code, NFPA 101. Fire protection features not addressed by the NFC should be designed to comply with requirements of the latest edition of the International Building Code (IBC). For guidance on compliance with other Codes and Standards, refer to PG-18-3 Design and Construction Procedures, Topic 1.

Concerns Specific to Supply, Processing & Distribution

Equipment: Equipment may be purchased by either the VA (Owner) or the contractor and installed by the contractor (CC), or purchased by the VA (Owner) and installed by the VA or the Vendor (VV). If purchased by the contractor, specifications must be clearly written.

The Chief of SPD operations at each VA medical center is knowledgeable about equipment styles and types that best meet the needs of the facility, and should guide the selection of equipment. If purchasing equipment not listed in GSA catalogs, specifications must be sufficiently detailed to assure quality acquisition.

The selection of equipment should be fully coordinated with the facility's design in order that utility and space requirements are considered during design development. It is imperative that all power and water resources be fully accommodated, and that the mechanical and ventilation systems are designed to be responsive to heat loads created by specific equipment. Thus, the specific choice of equipment must be established early on to promote a consistent and coordinated plan. Careful attention must be given to the location and capacity of electric outlets, water and steam supply, drains, vacuum, exhaust ducts and other utilities, to insure capacity and compatibility with the equipment to be installed. Utilities and their locations are shown on the Guide Plates and are not project specific. It is the responsibility of the person selecting the equipment and the project designers to determine the adequacy of utilities in each space.

Sanitation Equipment: Frequent and thorough cleaning of shelves and room surfaces is essential to prevent build up of dust and unwanted particles which may contaminate medical and surgical supplies.

Room walls are manually scrubbed with either a detergent and/or disinfectant. Thus, to facilitate cleaning, walls are typically specified with a washable surface. Floors in the Soiled Receiving and Decontamination room may be damp mopped or cleaned with an electric floor scrubber. In the Sterile/Non-Sterile Storage Room; however, cleaning with a damp mop will suffice. Generally, storage shelves in the Sterile/Non-Sterile Storage Room are kept 200 to 250 mm (8 to 10 inches) above the floor to facilitate cleaning.

Ultrasonic Cleaners: Ultrasonic cleaners are often used as an initial step in the process of cleaning surgical instruments. Ultrasonic cleaners are a mechanical system that uses sound waves along with water and detergent to remove soil from instruments. Both tabletop and floor units are available. Full-size ultrasonic cleaner is needed and required Tabletop units can also be purchased specifically for cleaning delicate instruments with long lumens. Floor units are designed to accommodate large quantities of instruments at one time and can have either single or double chambers.

Washer/Disinfectors: Following the ultrasonic cleaning process, instruments are placed into washer/disinfectors. Instruments and trays are loaded into the unit on the Decontamination side of SPD, and removed upon completion of the cycle on the Prep/Pack side of SPD. Washer/Disinfectors are heated by either electric or steam. Automation systems for loading and unloading washer/disinfectors are highly recommended for departments that process large

volumes of instruments. Washer/disinfectors are typically recessed between the Decontamination area and the Prep/Pack area of SPD.

Scope Washers: These freestanding mechanical washers are used to effectively process flexible scopes with lumens such as endoscopes or colonoscopes. Some washers are equipped with a cycle that provides a final high-level disinfection flush. These will also be in the Decontamination Area.

Drying Cabinets: These freestanding cabinets are used to dry equipment either on racks or hooks. Drying cabinets are designed to have a constant air flow and variable temperature settings. There are single door and pass-thru door units available.

Steam Gun: Steam guns are powered by steam and are typically used to clean carts and other movable equipment that can withstand water and steam temperatures up to 270 degrees Fahrenheit. A steam gun should always be used in a dedicated equipment wash room with non-slip flooring and a floor drain.

Automatic Endoscope Reprocessors (AER): Mechanical units to wash and disinfect immersible endoscopes, these units will have water hook ups and drains. These units use an FDA-approved high-level disinfection solution to disinfect the semi-critical scopes after cleaning that do not require sterilization for use. These units will also be in the Decontamination Area.

Sterilizers

Steam: Steam sterilizers are used to sterilize surgical instruments and equipment that can withstand a temperature of 270 degrees Fahrenheit. Sterilizers are available in both cart-loading and floor-loading models. Single door or pass-thru units can be used depending on the department workflow. Steam sterilizers can be either freestanding or recessed.

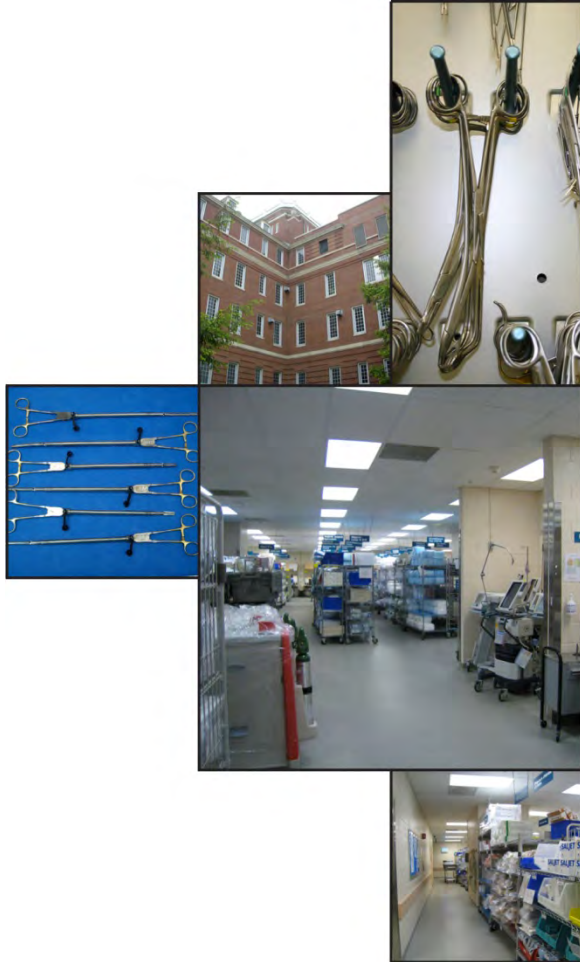
Ethylene Oxide: Ethylene Oxide (EtO) sterilizers are used to sterilize items that cannot withstand high temperature sterilization. They are designed with both a sterilization cycle of 130 degrees Fahrenheit, and an aeration cycle. Items should never be removed from an EtO sterilizer until an aeration cycle is complete. EtO Sterilizers are generally small and can be loaded by cart or by hand. A separate room should be dedicated for Ethylene Oxide sterilizers and no other activity should occur in the room except to load and unload the units. Ethylene Oxide is a carcinogenic gas that can cause difficulty breathing, dizziness, and convulsions. Contact with liquid EtO can cause severe skin burns. EtO sterilizers can be either freestanding or recessed. A dedicated exhaust system is required for Ethylene Oxide. Consult the VA HVAC Design Manual for EtO exhaust system design requirements.

Gas Plasma: Gas plasma sterilization uses hydrogen peroxide to sterilize instruments and equipment that cannot withstand high temperature sterilization. These sterilizers are powered by electric and are either floor or counter mounted. There are no plumbing or steam requirements, so the sterilizers can be easily relocated.

Scope Sterilizer: Scope sterilizers use a liquid chemical to sterilize immersible scopes that cannot withstand high temperature sterilization. These sterilizers require electric and plumbing. Units can be either mobile or counter mounted.

Section 3

Functional Diagrams



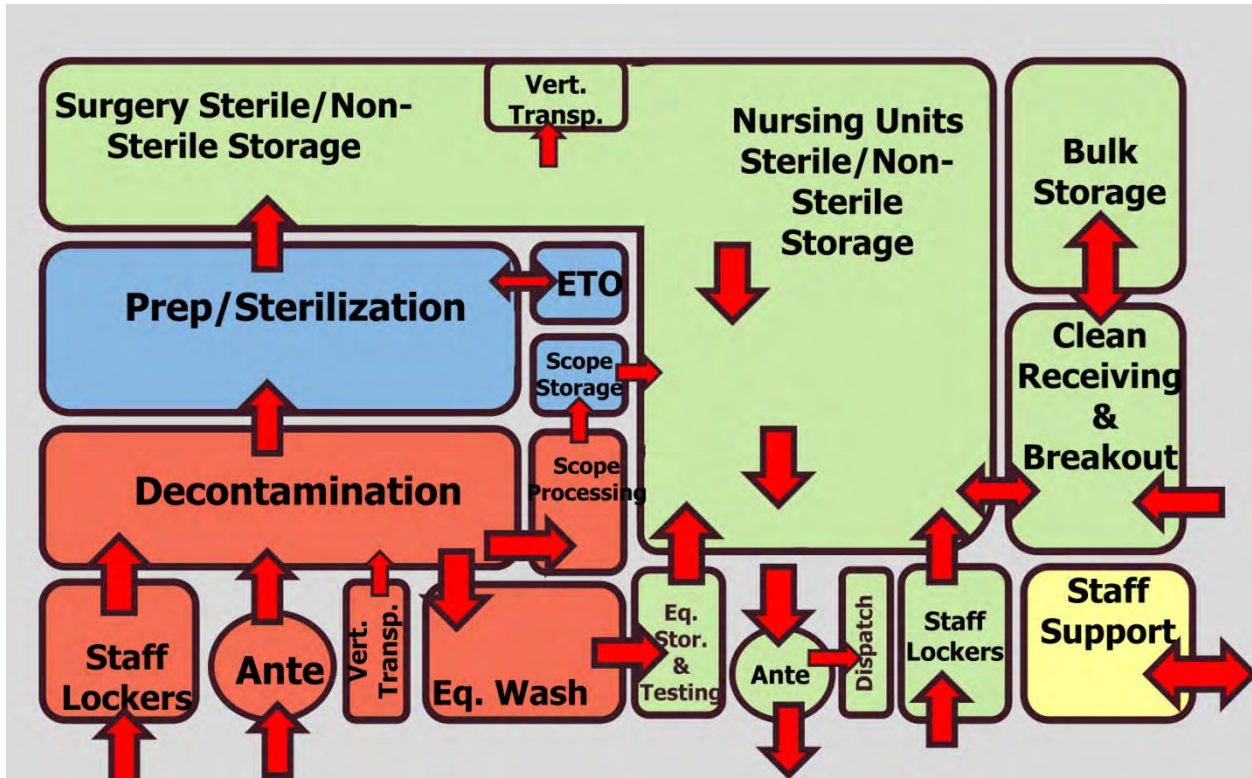
	Page
Net and Departmental Gross Area.....	3-1
Functional Relationship Diagram.....	3-2
Work Flow Relationship Diagram.....	3-3
Material Flow Relationship Diagram.....	3-4
Personnel Circulation Relationship Diagram.....	3-5
Air Flow Relationship Diagram.....	3-6

This page intentionally left blank.

Net and Departmental Gross Area

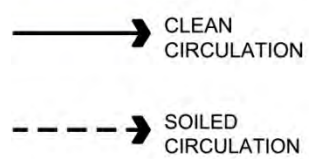
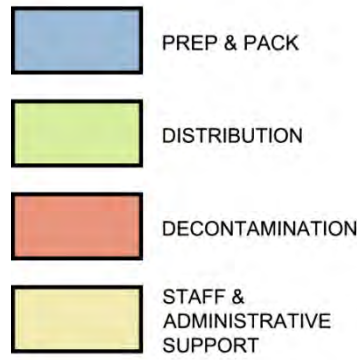
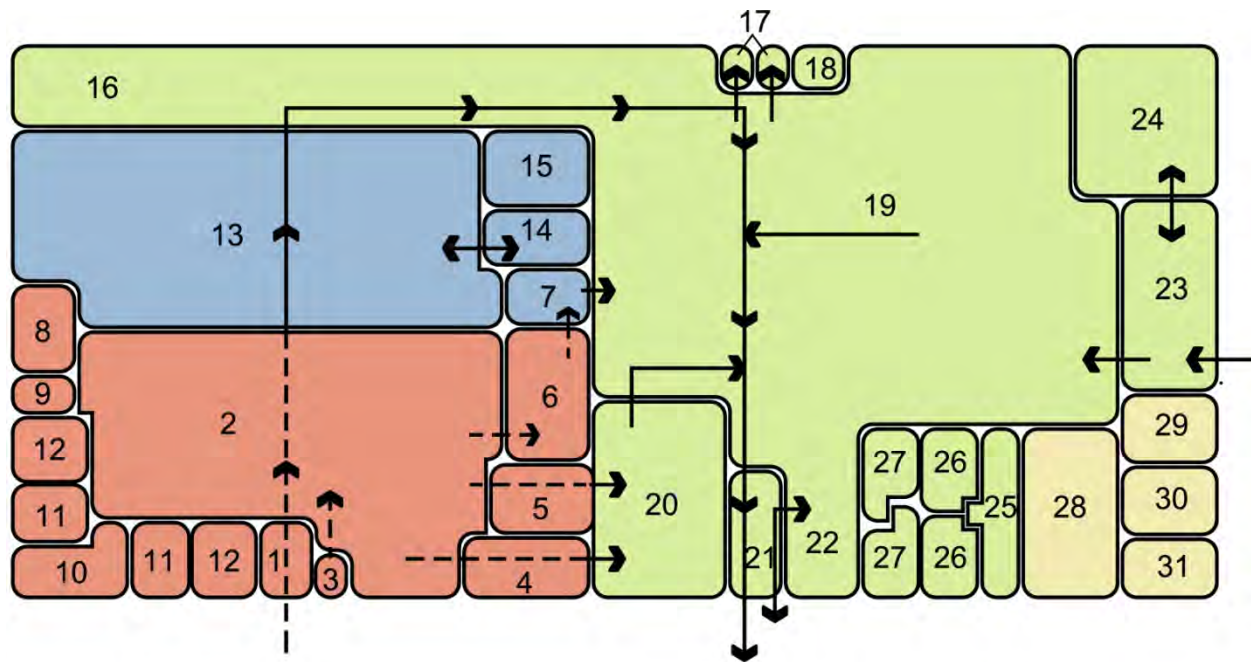
Net Area (Net Square Feet, NSF; or Net Square Meters, NSM) is the actual floor area in a room or functional area (finish to finish) that can be used by people, furnishings, or equipment. Department Gross Square Feet (DGSF) includes, in addition to the Net Area, partitions and circulation internal to the functional area of the department. The net to department gross factor (NTDG factor) adopted by VA for SPD is 1.30. The 1.30 factor anticipates that the internal circulation must be added to connect functional areas and individual rooms.

Functional Relationship Diagram



Relationship Diagram

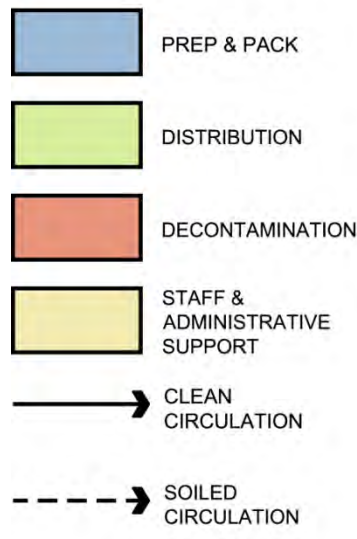
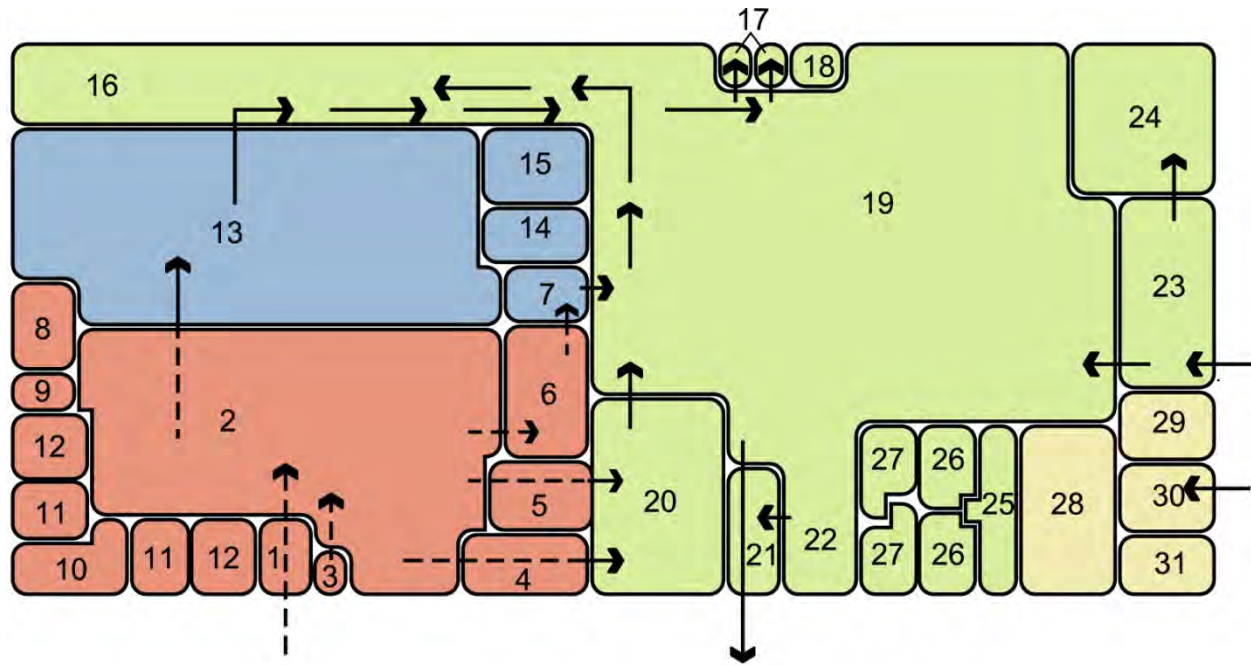
Work Flow



- | | |
|---|--|
| <ul style="list-style-type: none"> 1. ANTE-ROOM: SOILED RECEIVING & DECONTAMINATION 2. SOILED RECEIVING & DECONTAMINATION 3. VERTICAL TRANSPORTATION (SOILED) 4. MANUAL WASH 5. AUTOMATIC CART WASH 6. ENDOSCOPE PROCESSING/ HIGH LEVEL DISINFECTION 7. SCOPE STORAGE 8. DETERGENT & WATER TREATMENT 9. HAC (SOILED) 10. ANTE-ROOM: DECON/PPE/ GOWNING 11. LOCKER ROOMS (SOILED) 12. TOILET & SHOWER (SOILED) 13. PREPARATION, ASSEMBLY & STERILIZATION 14. ETO STERILIZER 15. ETO AERATOR | <ul style="list-style-type: none"> 16. STERILE/ NON-STERILE STORAGE (SURGERY) 17. VERTICAL TRANSPORTATION (CLEAN) 18. HAC (CLEAN) 19. STERILE/ NON-STERILE STORAGE (NURSING UNITS) 20. EQUIPMENT STORAGE & TESTING 21. ANTE-ROOM: DISPATCH 22. DISPATCH AREA 23. CLEAN RECEIVING & BREAKOUT 24. BULK STORAGE 25. ANTE-ROOM: PPE (CLEAN) 26. LOCKER ROOMS (CLEAN) 27. TOILET & SHOWER (CLEAN) 28. STAFF - CONFERENCE ROOM 29. OFFICE, CHIEF OF SPD 30. OFFICE, FIRST CLERK 31. OFFICE, ASSISTANT CHEIF OF SPD |
|---|--|

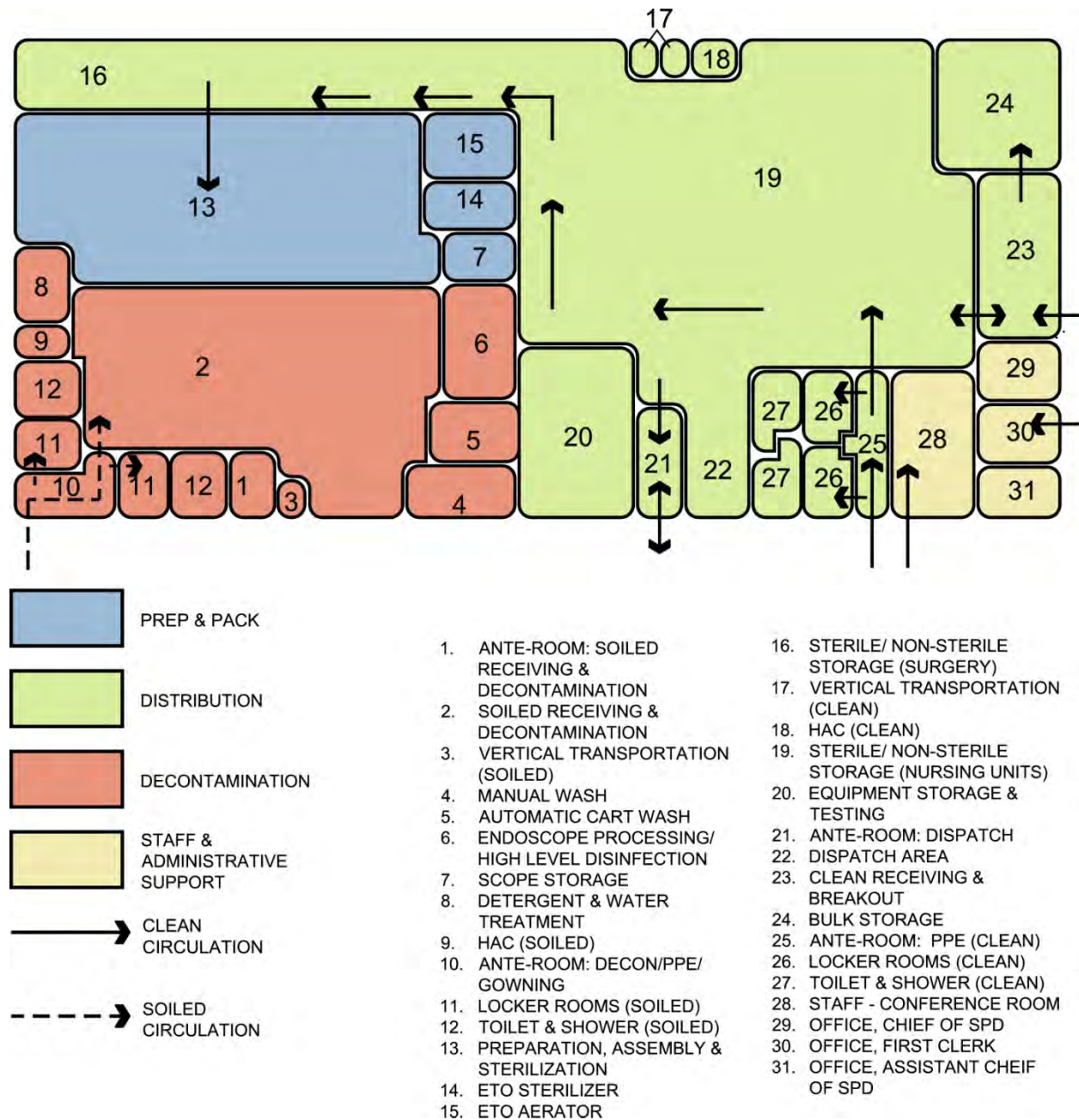
Relationship Diagram

Material Flow



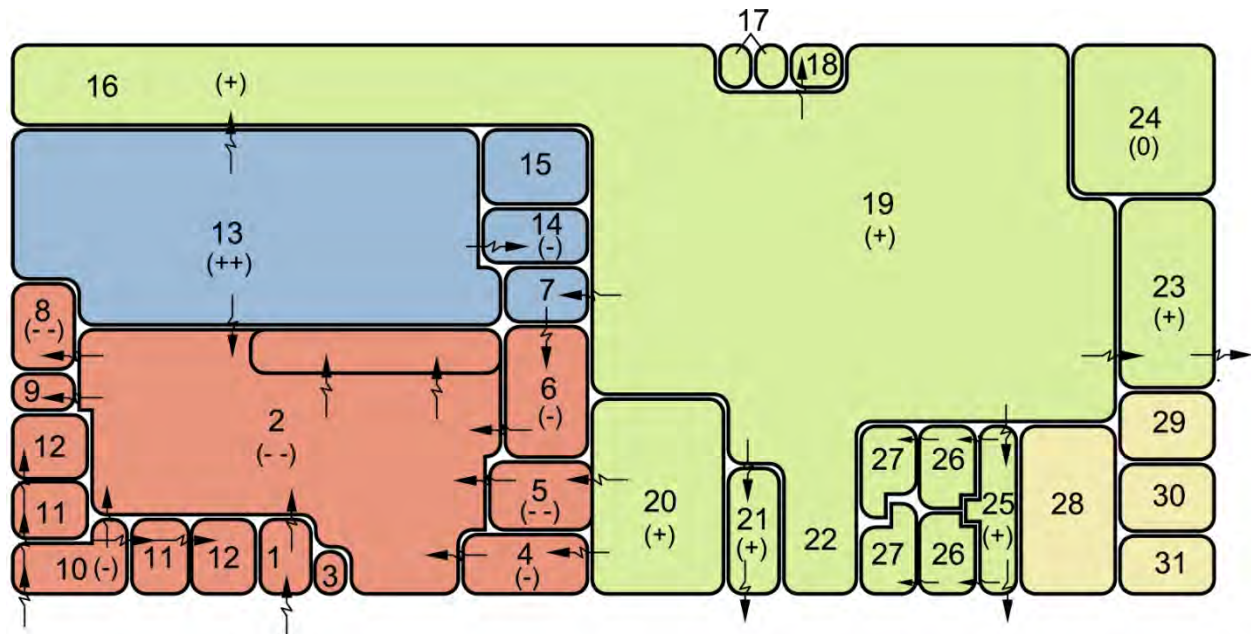
- | | |
|---|--|
| <ol style="list-style-type: none"> 1. ANTE-ROOM: SOILED RECEIVING & DECONTAMINATION 2. SOILED RECEIVING & DECONTAMINATION 3. VERTICAL TRANSPORTATION (SOILED) 4. MANUAL WASH 5. AUTOMATIC CART WASH 6. ENDOSCOPE PROCESSING/ HIGH LEVEL DISINFECTION 7. SCOPE STORAGE 8. DETERGENT & WATER TREATMENT 9. HAC (SOILED) 10. ANTE-ROOM: DECON/PPE/ GOWNING 11. LOCKER ROOMS (SOILED) 12. TOILET & SHOWER (SOILED) 13. PREPARATION, ASSEMBLY & STERILIZATION 14. ETO STERILIZER 15. ETO AERATOR | <ol style="list-style-type: none"> 16. STERILE/ NON-STERILE STORAGE (SURGERY) 17. VERTICAL TRANSPORTATION (CLEAN) 18. HAC (CLEAN) 19. STERILE/ NON-STERILE STORAGE (NURSING UNITS) 20. EQUIPMENT STORAGE & TESTING 21. ANTE-ROOM: DISPATCH 22. DISPATCH AREA 23. CLEAN RECEIVING & BREAKOUT 24. BULK STORAGE 25. ANTE-ROOM: PPE (CLEAN) 26. LOCKER ROOMS (CLEAN) 27. TOILET & SHOWER (CLEAN) 28. STAFF - CONFERENCE ROOM 29. OFFICE, CHIEF OF SPD 30. OFFICE, FIRST CLERK 31. OFFICE, ASSISTANT CHEIF OF SPD |
|---|--|

Relationship Diagram
Personnel Circulation



Relationship Diagram

Air Flow



- PREP & PACK
- DISTRIBUTION
- DECONTAMINATION
- STAFF & ADMINISTRATIVE SUPPORT

- AIRFLOW DIRECTION
- (+) POSITIVE ROOM PRESSURIZATION
- (++) DOUBLE POSITIVE ROOM PRESSURIZATION
- (-) NEGATIVE ROOM PRESSURIZATION
- (--) DOUBLE NEGATIVE ROOM PRESSURIZATION
- (0) NEUTRAL

- | | |
|---|--|
| <ol style="list-style-type: none"> 1. ANTE-ROOM: SOILED RECEIVING & DECONTAMINATION 2. SOILED RECEIVING & DECONTAMINATION 3. VERTICAL TRANSPORTATION (SOILED) 4. MANUAL WASH 5. AUTOMATIC CART WASH 6. ENDOSCOPE PROCESSING/ HIGH LEVEL DISINFECTION 7. SCOPE STORAGE 8. DETERGENT & WATER TREATMENT 9. HAC (SOILED) 10. ANTE-ROOM: DECON/PPE/ GOWNING 11. LOCKER ROOMS (SOILED) 12. TOILET & SHOWER (SOILED) 13. PREPARATION, ASSEMBLY & STERILIZATION 14. ETO STERILIZER 15. ETO AERATOR | <ol style="list-style-type: none"> 16. STERILE/ NON-STERILE STORAGE (SURGERY) 17. VERTICAL TRANSPORTATION (CLEAN) 18. HAC (CLEAN) 19. STERILE/ NON-STERILE STORAGE (NURSING UNITS) 20. EQUIPMENT STORAGE & TESTING 21. ANTE-ROOM: DISPATCH 22. DISPATCH AREA 23. CLEAN RECEIVING & BREAKOUT 24. BULK STORAGE 25. ANTE-ROOM: PPE (CLEAN) 26. LOCKER ROOMS (CLEAN) 27. TOILET & SHOWER (CLEAN) 28. STAFF - CONFERENCE ROOM 29. OFFICE, CHIEF OF SPD 30. OFFICE, FIRST CLERK 31. OFFICE, ASSISTANT CHEIF OF SPD |
|---|--|