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Introduction

This Surgical Service Design Guide was developed as a design tool to assist the medical profession in better understanding the choices that designers ask them to make and to help the designers understand the functional requirements necessary for patient care, and is intended to be a graphic consolidation of existing Department of Veterans Affairs' criteria. It contains data from the VA Technical Information Library (TIL); www.va.gov/facmgt/standard.

- Master Construction Specifications [PG-18-1](#)
- Design and Construction Procedures [PG-18-3](#)
- Standard Details [PG-18-4](#)
- Equipment Reference Manual [PG-18-6](#); www.va.gov/facmgt/standard/equipment.asp
- Design Manuals [PG-18-10](#)
- Barrier Free Design Handbook [H-18-13](#); www.va.gov/facmgt/standard/dguide/barrfree.doc
- Room Finishes, Door and Hardware Schedules [PG-18-14](#)
- Equipment Guide List [PG-7610](#); www.va.gov/facmgt/standard/equipment.asp
- Consensus information received from Advisory Committee; comprised of VA Surgery Department, Surgical Field Personnel, VACO and the Consultants.

The purpose is to make this Design Guide *user friendly* and to serve as an index for the design of surgical suites.

The guide plates contained in this Design Guide are intended as an illustration of VA's furniture, equipment and personnel space needs. They are not meant to limit design opportunities; while they do contain the majority of spaces that now are required in the surgical suite, it is not possible to encompass all future requirements. Therefore, it is recommended that the project-specific space program be the starting point for any individual project design. In addition, it is important to note that the guide plates are a graphic representation only, utilizing the standard details that have been developed by VA to act as generic representation in order to determine spatial requirements. Specific contracts for equipment will be awarded after the project has been bid. Where needed to establish space and service design requirements, a minimum of three manufacturers should be consulted for specific equipment. The maximum space and service requirements should be used for planning purposes.



Credits

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Abbreviations

| | | | |
|-------|---|-------|--|
| A | Amps | NFPA | National Fire Protection Association |
| ABV | Above | NSF | Net Square Feet |
| ADO | Automatic Door Opener | NSM | Net Square Meters |
| AF | After Filter | NTS | Not To Scale |
| AFF | Above Finished Floor | OC | On Center |
| AI | Acquisition Information | OCC | Occupied |
| AR | As Required | OR | Operating Room |
| AT | Acoustical Tile | P | Paint |
| CBB | Concrete Backer Board | PACU | Post Anesthesia Care Unit |
| CC | Contractor Furnished, Contractor Installed, Construction Funds | PBPU | Prefabricated Bedside Patient Unit |
| CD | Construction Detail, see Standard Detail | PF | Pre-filter |
| CF | Construction Funds, VA Furnished, Installed by VA or Contractor | PG | Program Guide |
| CFM | Cubic Feet per Minute | PL | Plaster |
| CLG | Ceiling | PSF | Pounds Per Square Foot |
| CP | Carpet | RB | Resilient Base |
| CPT | Carpet Tile | RA | Return Air |
| CRP | Corrosion Resistant Piping | REC | Receptacle |
| CRS | Corrosion Resisting Steel | REFL | Reflected |
| CS | Construction Standard | RH | Relative Humidity |
| CT | Ceramic Tile | RSF | Resilient Sheet Flooring |
| EA | Exhaust Air | SA | Supply Air |
| ES | Equipment Symbol | SC | High Build Glazed Coating (Special Coating) |
| FC | Footcandle | SD | Standard Details |
| FD | Floor Drain | SF | Square Foot, Square Feet |
| FLUOR | Fluorescent | SPD | Supply Processing and Distribution |
| FPS | Fire Protection System | SPDT | Single Pole, Double Throw |
| GEN | General | SRC | Semi-Restricted Corridor |
| GP | Guide Plate | SS | Stainless Steel |
| GWB | Gypsum Wallboard Systems | TIL | Technical Information Library (http://www.va.gov/facmgt/standard/) |
| HAC | Housekeeping Aids Closet | UNOCC | Unoccupied |
| HIPAA | Health Insurance Portability and Accountability Act | V | Volts |
| HVAC | Heating, Ventilating and Air-Conditioning | VA | Volt-ampere |
| IPU | Isolated Power Unit | VC | VA Furnished Contractor Installed, Medical Care Funds for Purchase, Construction Funds for Installation |
| KVA | Kilovolt Ampere | VCT | Resilient Tile Flooring (Vinyl Composition Tile) |
| L/T/S | Lockers, Toilets, Showers | VL | Laboratory (Conventional) Furniture |
| MAT | Materials | VS | Sterilizer and Associated Equipment |
| MCS | Master Construction Specification | VV | VA Furnished, VA Installed; Medical Care Appropriation |
| mm,MM | Millimeter | W | Wallcovering (Vinyl Coated Fabric) |
| MTD | Mounted | W | Watts |
| | | WSF | Welded Seam Sheet Flooring |
| | | WVF | Welded Vinyl Flooring |



Legend of Symbols

| System | Description of Symbol | Symbols |
|-------------------|---|---------|
| 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 5-10R-20 AMP-MOUNTED 18" AFF | |
| | DUPLEX RECEPTACLE WITH GROUND FAULT INTERRUPTER, NEMA 5-20R-20 AMP- MOUNTED ABOVE COUNTER TOP | |
| | WATERPROOF DUPLEX RECEPTACLE WITH GFI, NEMA 5-20R-20 AMP- MOUNTED 18" AFF UNLESS OTHERWISE NOTED | |
| | QUADRUPLEX OUTLET, NEMA 5-20R-20 AMP-MOUNTED 18" AFF UNLESS OR QUADRUPLEX OUTLET, NEMA 5-20R-20 AMP- PEDESTAL MOUNTED | |
| | QUADRUPLEX OUTLET, NEMA 5-20R-20 AMP-MOUNTED ABOVE COUNTER TOP | |
| | QUADRUPLEX OUTLET WITH GROUND FAULT INTERRUPTER, NEMA 5-20R-20 AMP MOUNTED 18" AFF UNLESS OTHERWISE NOTED | |
| | QUADRUPLEX OUTLET WITH GROUND FAULT INTERRUPTER, NEMA 5-20R-20 AMP MOUNTED ABOVE COUNTER TOP | |
| | SPECIAL RECEPTACLE | |
| | TELEVISION OUTLET | |
| | ELECTRICAL STRIP MOLD, NEMA-5-20R-20 AMP RECEPTACLES AT 2'-0" INTERVALS | |
| | ELAPSED TIME CLOCK | |
| | SWEEP SECOND HAND CLOCK | |
| | ELECTRICAL POWER MODULE | |

| System | Description of Symbol | Symbols |
|----------|--|---------|
| Switches | SINGLE POLE SWITCH | |
| | SINGLE POLE SWITCH- SUFFIX OF "a", "b", "c" INDICATES SEPARATE CONTROL OF FIXTURES WITH SAME DESIGNATION | |
| | DIMMER SWITCH | |
| | THREE-WAY SWITCH | |
| | VARIABLE INTENSITY CONTROL FOR SURGICAL LIGHTS | |
| | DOOR SWITCH (AUTOMATIC DOOR OPENER) | |
| | FUSED OR UNFUSED DISCONNECT SWITCH | |
| Lighting | EMERGENCY POWER OFF (EPO) PUSH BUTTON | |
| | 2' X 2' RECESSED FLUORESCENT FIXTURE | |
| | 1' X 4' RECESSED FLUORESCENT FIXTURE | |
| | 2' X 4' RECESSED FLUORESCENT FIXTURE | |
| | 2' X 2' RECESSED FLUORESCENT FIXTURE EMERGENCY POWER | |
| | 2' X 4' RECESSED FLUORESCENT FIXTURE EMERGENCY POWER | |
| | WALL MOUNTED LIGHT FIXTURE TYPE AS NOTED | |



| System | Description of Symbol | Symbols |
|----------------|---|---------|
| Communications | 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 REQUIRED | |
| | SPEAKER- CEILING MOUNTED | |
| | INTERCOM OUTLET | |
| | NURSE CALL DOME LIGHT- CEILING MOUNTED | |
| | NURSE CALL DOME LIGHT- WALL MOUNTED | |
| | NURSE CALL DUTY STATION | |
| | EMERGENCY NURSE CALL STATION | |
| | NURSE CALL STAFF STATION | |
| | VOLUME CONTROL- WALL MOUNTED | |

| System | Description of Symbol | Symbols |
|-----------------|--|---------|
| Special Outlets | JUNCTION BOX- PURPOSE AND LOCATION AS NOTED | |
| Mechanical | SUPPLY AIR DIFFUSER | |
| | RETURN OR EXHAUST AIR REGISTER OR GRILLE | |
| | ROOM THERMOSTAT- MOUNTED 5' AFF | |
| | ROOM HUMIDISTAT- MOUNTED 5' AFF | |
| Plumbing | COMBINATION FAUCET HOSE BIBB | |
| | MEDICAL GAS OUTLET | |
| | OXYGEN OUTLET | |
| | AIR OUTLET | |
| | VACUUM OUTLET | |
| Other | DOOR DESIGNATION - REFER TO PG-18-14 FOR DESCRIPTION | |

