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elevations, schedules, details, and such other information as required to indicate the extent of the work.

Product selections shall be based on esthetic values and cost as related to project needs.

1.1 REFERENCES

NOTE: This paragraph is used to list the publications cited in the text of the guide specification. The publications are referred to in the text by basic designation only and listed in this paragraph by organization, designation, date, and title.

Use the Reference Wizard's Check Reference feature when you add a RID outside of the Section's Reference Article to automatically place the reference in the Reference Article. Also use the Reference Wizard's Check Reference feature to update the issue dates.

References not used in the text will automatically be deleted from this section of the project specification when you choose to reconcile references in the publish print process.

The publications listed below form a part of this specification to the extent referenced. The publications are referred to within the text by the basic designation only.

ASTM INTERNATIONAL (ASTM)

ASTM C 1036	(2001) Standard Specification for Flat Glass
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1.2 SUBMITTALS

NOTE: Review Submittal Description (SD) definitions in Section 01330 SUBMITTAL PROCEDURES and edit the following list to reflect only the submittals required for the project. Submittals should be kept to the minimum required for adequate quality control.

A "G" following a submittal item indicates that the submittal requires Government approval. Some submittals are already marked with a "G". Only delete an existing "G" if the submittal item is not complex and can be reviewed through the Contractor's Quality Control system. Only add a "G" if the submittal is sufficiently important or complex in context of the project.

For submittals requiring Government approval on Army

projects, a code of up to three characters within the submittal tags may be used following the "G" designation to indicate the approving authority. Codes for Army projects using the Resident Management System (RMS) are: "AE" for Architect-Engineer; "DO" for District Office (Engineering Division or other organization in the District Office); "AO" for Area Office; "RO" for Resident Office; and "PO" for Project Office. Codes following the "G" typically are not used for Navy, Air Force, and NASA projects.

Choose the first bracketed item for Navy, Air Force and NASA projects, or choose the second bracketed item for Army projects.

Government approval is required for submittals with a "G" designation; submittals not having a "G" designation are [for Contractor Quality Control approval.] [for information only. When used, a designation following the "G" designation identifies the office that will review the submittal for the Government.] Submit the following in accordance with Section 01330 SUBMITTAL PROCEDURES:

SD-03 Product Data

Finishes[; G][; G, [____]]
Accessory Items[; G][; G, [____]]

Manufacturer's descriptive data and catalog cuts indicating materials of construction, fasteners proposed for use for each type of wall construction, mounting instructions, operation instructions, and cleaning instructions.

SD-04 Samples

Finishes[; G][; G, [____]]
Accessory Items[; G][; G, [____]]

One sample of each accessory proposed for use. Incorporate approved samples into the finished work, providing they are identified and their locations noted.

SD-07 Certificates

Accessory Items

Submit for each type of accessory specified, attesting that the items meet the specified requirements.

SD-10 Operation and Maintenance Data

Electric Hand Dryer[; G][; G, [____]]

[Four] [____] complete copies of maintenance instructions listing routine maintenance procedures and possible breakdowns. Include repairs instructions for simplified wiring and control diagrams and other information necessary for unit maintenance.

1.3 DELIVERY, STORAGE, AND HANDLING

Wrap toilet accessories for shipment and storage, then delivered to the jobsite in manufacturer's original packaging, and stored in a clean, dry area protected from construction damage and vandalism.

1.4 WARRANTY

Warrant or guarantee all manufacturer's standard performance that extend beyond a 1 year period.

PART 2 PRODUCTS

NOTE: Only those accessories and finishes normally suitable for military construction are included in this guide specification. When other accessories and finishes are required to meet the needs of the project, the specifier must add them. Maximum use should be made of recessed accessories in areas of hard usage.

2.1 MANUFACTURED UNITS

Provide toilet accessories in accordance with paragraph SCHEDULE. Porcelain type, tile-wall accessories are specified in Section 09310S CERAMIC TILE. Provide each accessory item with the necessary mounting plates of sturdy construction with corrosion resistant surface.

2.1.1 Anchors and Fasteners

NOTE: Tamperproof fasteners will be specified for accessories which have exposed fasteners in areas used by neuropsychiatric patients or prisoners and where theft or vandalism would be a problem. This guide specification places the responsibility with the Contractor for providing, subject to Government approval, fasteners and anchors of the type, size and number required to adequately secure the accessory items. Specific requirements for critical or unusual applications may refer to details on the drawings, or the specifications may be expanded to include the necessary requirements.

Provide anchors and fasteners capable of developing a restraining force commensurate with the strength of the accessory to be mounted and suited for use with the supporting construction. Provide [tamper proof design] [oval head] exposed fasteners with finish to match the accessory.

2.1.2 Finishes

Except where noted otherwise, provide the following finishes on metal:

<u>Metal</u>	<u>Finish</u>
Stainless steel	No. 4 satin finish

Metal

Carbon steel, copper alloy,
and brass

Finish

Chromium plated, bright

2.2 ACCESSORY ITEMS

NOTE: Drawings will show location, widths and heights, and vertical height above finished floor, as required, for accessory items.

Only those accessory items to be used will be retained. Identifying abbreviation in parentheses will be retained for those items to be used and shown on the drawings. The various accessory items will generally be used in the following locations:

DCS: Public toilets and toilets in nondomiciliary type buildings in accordance with the requirements of the using service.

EHD: Public toilets and toilets in nondomiciliary type buildings upon specific written request by the using service.

FTD: Private bathrooms used by women.
Private/semi-private bathrooms in guest/transient quarters. Limit to one per bathroom.

GB: Bathrooms that will be used by handicapped or people in a weakened condition, such as in hospitals. Vertical grab bars should be considered in private bathrooms where a soap and grab bar combination (SGR) accessory is not provided. Forms and lengths will be shown on the drawings.

MC: Private bathrooms where storage of personal items in the bathroom is desirable. Limit to one per bathroom.

MG: Private bathrooms where a medicine cabinet is not provided, in general-use toilets, and hand washing areas. Mirror 450 mm 18 inches by 750 mm 30 inches will be specified in Section 08805S GLASS AND GLAZING. Limit to not more than one per lavatory. Adjustable tilt mirror will be provided in areas to be used by wheelchair handicapped.

MM: Areas used by neuropsychiatric patients or prisoners and where vandalism would be a problem. Limit to one per toilet in single lavatory installation.

PTD: Public toilets and toilets in nondomiciliary type buildings in accordance with the requirements of the using service. Limit to not more than one per two lavatories, except one per toilet in single

lavatory installation.

PTDWR: Public toilets and toilets in nondomiciliary type buildings in areas which have regularly scheduled waste removal. Limit to one per two lavatories except one per toilet in single lavatory installation.

SND: Public toilets and toilets in nondomiciliary type buildings used by women. Disposer will be mounted in the toilet compartments. Each toilet compartment shall be accessible to a disposal unit.

SNTD: Public toilets and toilets in nondomiciliary type buildings used by women. Use of recessed units will be considered for installations which are required to present an excellent appearance. Limit to one per toilet.

SC & SCR: Installations with combination bathtub and shower SCR units which include rails and curtains. One per shower-tub installation and one per individual shower installation.

SD: Public toilets and toilets in nondomiciliary type buildings unless included with paper towel dispenser. Limit to one per lavatory.

SH: Private toilets with lavatory unless soap dispenser is specified. Limit to one per private toilet.

SMHD: Troop facilities and other areas subject to rough usage. Installation will be detailed on the drawings.

SMLD: Private bathrooms where a glass shelf or medicine cabinet is not provided.

SGR: Installations with bathtub or shower. Limit to one per bathtub or shower-tub installation and one per separate showerhead.

TB: Private bathrooms. Limit to two per bathroom. For safety purposes in wet areas consider using a horizontal grab bar in lieu of towel bar.

TSCD: Public toilets and toilets in nondomiciliary type buildings in accordance with the requirements of the using service.

TP: Private bathrooms where a shower is provided in lieu of a bathtub. Limit to one per bathroom.

TTD: All toilet areas. Limit to one per water closet.

TTH: Private bathrooms. Limit to one per lavatory.

WR: Public toilets and toilets in nondomiciliary type buildings when requested by the using service. Limit to not more than one per two paper towel dispensers. Use of recessed combination units will be considered for installations which have frequent scheduled trash removal service.

Conform to the requirements for accessory items specified below.

2.2.1 Facial Tissue Dispenser (FTD)

Provide [surface] [recessed] mounted facial tissue dispenser, Type 304 stainless steel face, [satin finish] [bright polished finish]. Secure face of recessed dispenser by friction with suitable spring steel clips. Provide a minimum capacity of [150] [200] [300] two-ply tissues for dispenser.

2.2.2 Grab Bar (GB)

Provide an 18 gauge, 32 mm 1-1/4 inch grab bar OD Type 304 stainless steel. Provide form and length for grab bar as indicated. Provide [concealed] [exposed] mounting flange. Provide grab bar with [satin finish] [peened non-slip surface]. Furnish installed bars capable of withstanding a 2.225 kN 500 pound vertical load without coming loose from the fastenings and without obvious permanent deformation. Allow 38 mm 1-1/2 inch space between wall and grab bar.

2.2.3 Medicine Cabinet (MC)

Construct medicine cabinet with cold-rolled carbon steel sheet of minimum thickness 0.76 mm .03 inch, formed from a single sheet of steel or mechanically formed spot welded. Provide width, height and depth of cabinet in accordance with paragraph SCHEDULE.

2.2.3.1 Sliding Door Cabinet, Class 1

Provide [surface mounted vanity] [recessed cabinet] sliding door cabinet assembly with design and lighting arrangement as indicated. Provide a minimum of 2 shelves per cabinet. Provide [a wide frame] [a narrow frame] [no frame] mirror.

2.2.3.2 Swinging Door Cabinet, Class 2

Indicate swinging door cabinet assembly including the lighting arrangement. Provide [surface] [recess] mounted assembly. Locate cabinet centrally behind the door with a minimum of two shelves. Provide stainless steel or carbon steel door hinges. Provide permanent type magnets used in door catches. Provide doors [with] [without] a mirror.

2.2.4 Mirrors, Glass (MG)

Provide Type I transparent flat type, Class 1-clear glass for mirrors. Glazing Quality q1 6 mm 1/4 inch thick conforming to ASTM C 1036. Coat glass on one surface with silver coating, copper protective coating, and mirror backing paint. Provide highly adhesive pure silver coating of a thickness which provides reflectivity of 83 percent or more of incident light when viewed through 6 mm 1/4 inch thick glass, free of pinholes or other defects. Provide copper protective coating with pure bright

reflective copper, homogeneous without sludge, pinholes or other defects, of proper thickness to prevent "adhesion pull" by mirror backing paint. Provide mirror backing paint with two coats of special scratch and abrasion-resistant paint and baked in uniform thickness to provide a protection for silver and copper coatings which will permit normal cutting and edge fabrication.

2.2.5 Mirror, Metal (MM)

Provide a brightly polished stainless steel, metal mirror of, 0.94 mm 0.037 inch minimum thickness, edges turned back 6 mm 1/4 inch and recess fitted with tempered hardboard backing, and theft-proof fasteners. Provide size in accordance with paragraph SCHEDULE.

2.2.6 Mirror, Tilt (MT)

NOTE: Mounting height of mirror shall be shown on the drawings.

Provide surface mounted tilt mirror with full visibility for persons in a wheelchair. Furnish [adjustable] [fixed] tilt mirror, extending at least 100 mm 4 inch from the wall at the top and tapering to 25 mm 1 inch at the bottom. Provide size in accordance with [paragraph SCHEDULE] [the drawings] [_____]. Conform to ASTM C 1036 and paragraph for Glass Mirrors.

2.2.7 Paper Towel Dispenser (PTD)

NOTE: A tumbler key lock is the standard locking mechanism for manufacturers and push button or twist-type locks are normally a specialty, extra-cost item, if available.

Provide [_____] paper towel dispenser constructed of a minimum [22 gauge carbon steel] [0.683 mm 0.269 inch Type 304 stainless steel], [surface] [recessed] mounted. Provide a towel compartment and a [mirror door] [and] [liquid soap dispenser] for each dispenser. Furnish [tumbler key lock] [concealed tumbler key lock] locking mechanism.

2.2.8 Combination Paper Towel Dispenser/Waste Receptacle Units (PTDWR)

Provide [recessed] [semi-recessed] dispenser/receptacle with a capacity of [400] [600] [_____] sheets of C-fold, single-fold, or quarter-fold towel. Design waste receptacle to be locked in unit and removable for service. Provide tumbler key locking mechanism. Provide waste receptacle capacity of [45] [68] [_____] L. [12] [18] [_____] gallons. Fabricate a minimum 0.8 mm 0.30 inch stainless steel welded construction unit with all exposed surfaces having a satin finish. Provide waste receptacle that accepts reusable liner standard for unit manufacturer.

2.2.9 Sanitary Napkin Disposer (SND)

Construct a Type 304 stainless steel sanitary napkin disposal with removable leak-proof receptacle for disposable liners. Provide [fifty] [_____] disposable liners of the type standard with the manufacturer. Retain receptacle in cabinet by tumbler lock. Provide disposer with a door

for inserting disposed napkins, [recessed] [partition mounted, double access] [surface mounted].

2.2.10 Sanitary Napkin and Tampon Dispenser (SNTD)

NOTE: Specify sanitary napkin and tampon dispensers only when they are specifically requested, in writing, by the Using Agency.

Provide sanitary napkin and tampon dispenser [surface mounted] [recessed]. Dispenser, including door of Type 304 stainless steel that dispense both napkins and tampons with a minimum capacity of 20 each. Furnish dispensing mechanism for [complimentary] [coin] operation. Provide coin mechanisms with minimum denominations of 10 cents, 25 cents, 50 cents, [_____] [free]. Hang doors with a full-length corrosion-resistant steel piano hinge and secure with a tumbler lock. Provide keys for coin box different from the door keys.

2.2.11 Shower Curtain (SC)

Provide [_____] shower curtain, size to suit conditions. Provide anti-bacterial nylon/vinyl fabric curtain. Furnish [_____] color [as shown in Section 09915 COLOR SCHEDULE].

2.2.12 Shower Curtain Rods (SCR)

Provide Type 304 stainless steel shower curtain rods 32 mm 1-1/4 inch OD by 1.24 mm 0.049 inch minimum [straight] [bent as required] to meet installation conditions.

2.2.13 Soap Dispenser (SD)

NOTE: Powdered soap dispenser should be included for a shop or industrial area. Edit to meet project requirements.

Provide [surface mounted soap dispenser, liquid type consisting of a vertical Type 304 stainless steel tank with holding capacity of 1.2 L 40 fluid ounces with a corrosion-resistant all-purpose valve that dispenses liquid soaps, lotions, detergents and antiseptic soaps.] Provide [surface mount, powder type constructed of stainless steel or chromium plated zinc die casting, containing a swap feed mechanism and an agitator designed to break up powdered soap, with a minimum capacity of 0.94 L. 32 ounces.] [lavatory mounted, liquid type consisting of a polyethylene tank with a minimum 0.94 L 32 fluid ounces holding capacity and a [100 mm 4 inch] [150 mm 6 inch] spout length.]

2.2.14 Soap Holder (SH)

Provide [surface mounted] [recessed] Type 304 stainless steel soap holder. Provide stainless steel separate supports.

2.2.15 Shelf, Metal, Heavy Duty (SMHD)

NOTE: Where rough usage is anticipated, shelf support brackets and through-bolting of accessories should be required and indicated on the project drawings.

Furnish a minimum 18 gauge stainless steel heavy duty metal shelf with hemmed edges. Provide shelves over 750 mm 30 inch with intermediate supports. Provide minimum of 16 gauge supports, welded to the shelf, and spaced no more than 750 mm 30 inch apart.

2.2.16 Shelf, Metal, Light Duty (SMLD)

Support light duty metal shelf between brackets or on brackets. Purpose of brackets is to prevent lateral movement of the shelf. Furnish [450 mm 18 inch] [600 mm 24 inch] long shelf. Provide stainless steel shelf and brackets.

2.2.17 Soap and Grab Bar Combination, Recessed (SGR)

Provide recessed type, Type 304 stainless steel soap and grab bar combination, [bright polished finish] [satin finish].

2.2.18 Towel Bar (TB)

Provide stainless steel towel bar with a minimum thickness of 0.38 mm. 015 inch. Provide minimum 19 mm 3/4 inch diameter bar, or 16 mm 5/8 inch square. Provide [bright polish] [satin] finish.

2.2.19 Towel Pin (TP)

Provide towel pin with concealed wall fastenings, and a pin integral with or permanently fastened to wall flange with maximum projection 100 mm 4 inch. Provide [bright polish] [satin] finish.

2.2.20 Toilet Tissue Dispenser (TTD)

Furnish [Type II - surface mounted] [Type III - recess mounted] toilet tissue holder with two rolls of standard tissue [mounted horizontally] [stacked vertically]. Provide [carbon steel, bright chromium plated finish] [stainless steel, satin finish] cabinet.

2.2.21 Toilet Tissue Dispenser, Jumbo (TTDJ)

Provide surface mounted toilet tissue dispenser with 2 rolls of jumbo tissue. Fabricate cabinet of [Type 304, 18 gauge stainless steel with Type 304, 20 gauge stainless steel door] [high-impact plastic body and transparent plastic front cover]. Provide cover with key locks.

2.2.22 Toothbrush and Tumbler Holder (TTH)

Provide stainless steel, surface mounted toothbrush and tumbler holder. Furnish holder to hold a minimum of four toothbrushes in a vertical position. Provide 57 plus or minus 3 mm 2-1/4 plus or minus 1/8 inch in diameter size of hole for securing tumbler.

2.2.23 Waste Receptacle (WR)

NOTE: Locks are typically provided on recessed and semi-recessed receptacles.

Provide Type 304 stainless steel waste receptacle, designed for [recessed] [surface] mounting. Provide reuseable liner, of the type standard with the receptacle manufacturer. Provide a minimum [_____] cubic meter cubic feet capacity. Provide receptacles with push doors and doors for access to the waste compartment with continuous hinges. Furnish [tumbler key lock] [_____] locking mechanism.

2.2.24 Toilet Seat Cover Dispenser (TSCD)

Provide Type 304 stainless steel with [recessed mounted] [surface mounted] toilet seat cover dispensers. Provide dispenser with a minimum capacity of 500 seat covers.

2.2.25 Toilet Seat Cover/Tissue Dispenser/Waste Receptacle (TSCTDWR)

Provide stainless steel and [partition mounted] [recessed mounted] [surface mounted] toilet seat cover, tissue dispenser, and waste receptacle combination. Provide a minimum of 500 [seat covers] [seat covers per side] and [2] [4 (2 per side)] standard tissue rolls for each dispenser. Provide a waste receptacle of the reuseable liner of type standard with the receptacle manufacturer. Provide receptacle with [_____] cubic meter cubic feet capacity. Furnish [tumbler key lock] [_____] locking mechanism.

2.2.26 Electric Hand Dryer (EHD)

NOTE: Consider the use of electric hand driers in public toilet areas that may not receive daily custodian care and in areas where cleanliness is an issue such as food preparation, dining facilities, and hospitals.

Provide wall mount and electric hand dryer designed to operate at 110/125 volts, 60 cycle, single phase alternating current with a heating element core rating of a maximum 2100 watts. Provide dryer housing of single piece construction and of [white porcelain enamel] [chrome plated steel] [baked electrostatically applied epoxy] [_____] .

2.2.27 Diaper Changing Station (DCS)

NOTE: Omit requirement for integral dispenser for sanitary liners if not required.

Provide [recess mount] [surface mount] diaper changing station and fabricate of high impact plastic with no sharp edges. Concave unit fold down platform to the child's shape, equipped with nylon and velcro safety straps engineered to withstand a minimum static load of [155 kg 340 lb] [113 kg 250 lb]. Provide an integral dispenser for sanitary liners for each unit. Provide pictorial for universal use of safety graphics. Provide [_____] color [as shown in Section 09915 COLOR SCHEDULE].

PART 3 EXECUTION

3.1 INSTALLATION

Provide the same finish for the surfaces of fastening devices exposed after installation as the attached accessory. Provide oval exposed screw heads. Install accessories at the location and height indicated. Protect exposed surfaces of accessories with strippable plastic or by other means until the installation is accepted. After acceptance of accessories, remove and dispose of strippable plastic protection. Coordinate accessory manufacturer's mounting details with other trades as their work progresses. Use sealants for [brackets, plates, anchoring devices and similar items in showers [a silicone or polysulphide sealant] as they are set to provide a watertight installation.] After installation, thoroughly clean exposed surfaces and restore damaged work to its original condition or replace with new work.

3.1.1 Recessed Accessories

Fasten accessories with wood screws to studs, blocking or rough frame in wood construction. Set anchors in mortar in masonry construction. Fasten to metal studs or framing with sheet metal screws in metal construction.

3.1.2 Surface Mounted Accessories

NOTE: Shelf support brackets and through-bolting of accessories should be required and indicated on the project drawings when rough usage of accessories is anticipated. Attachment by through-bolting should be indicated for shelf brackets and mirrors.

Mount on concealed backplates, unless specified otherwise. Conceal fasteners on accessories without backplates. Install accessories with sheet metal screws or wood screws in lead-lined braided jute, teflon or neoprene sleeves, or lead expansion shields, or with toggle bolts or other approved fasteners as required by the construction. Install backplates in the same manner, or provide with lugs or anchors set in mortar, as required by the construction. Fasten accessories mounted on gypsum board and plaster walls without solid backing into the metal or wood studs or to solid wood blocking secured between wood studs, or to metal backplates secured to metal studs.

3.2 CLEANING

Clean material in accordance with manufacturer's recommendations. Do not use alkaline or abrasive agents. Take precautions to avoid scratching or marring exposed surfaces.

3.3 SCHEDULE

NOTE: A schedule of the accessories required will be added. Format for the schedule may be modified to suit local preference. In some cases it may be adequate to simply show the locations on the drawings or to specify locations in the specification text.

Accessories Required

Room or Space	MG	PTD	SMLD	SD	SH	TTD
<hr/>	<hr/>	<hr/>	<hr/>	<hr/>	<hr/>	<hr/>
[_____]	[_____]	[_____]	[_____]	[_____]	[_____]	[_____]

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