UNIFIED FACILITIES GUIDE SPECIFICATIONS

References are in agreement with UMRL dated January 2021
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SECTION 08 71 63

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04/06

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-- End of Section Table of Contents --

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USACE / NAVFAC / AFCEC / NASA	**UFGS-08 71 63 (April 2006)**

Preparing Activity: NAVFAC	**Replacing without change UFGS-11194 (August 2001)**

UNIFIED FACILITIES GUIDE SPECIFICATIONS

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SECTION 08 71 63

DETENTION HARDWARE
04/06

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NOTE: This guide specification covers the requirements for detention hardware for use in brigs and detention facilities.

Adhere to UFC 1-300-02 Unified Facilities Guide Specifications (UFGS) Format Standard when editing this guide specification or preparing new project specification sections. Edit this guide specification for project specific requirements by adding, deleting, or revising text. For bracketed items, choose applicable item(s) or insert appropriate information.

Remove information and requirements not required in respective project, whether or not brackets are present.

Comments, suggestions and recommended changes for this guide specification are welcome and should be submitted as a Criteria Change Request (CCR).
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****
NOTE: The following information shall be shown on the project drawings:

1. Security hardware set numbers in door schedule.

2. Elevations and details of food pass.

3. Elevations of lock pocket locations in security doors and frames.

4. Elevations and details of security locks installed gates.
****

PART 1 GENERAL

1.1 REFERENCES

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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 Reference Identifier (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.

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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.

BUILDERS HARDWARE MANUFACTURERS ASSOCIATION (BHMA)

ANSI/BHMA A156.1	(2016) Butts and Hinges
ANSI/BHMA A156.4	(2013) Door Controls - Closers
ANSI/BHMA A156.5	(2020) Cylinder and Input Devices for Locks
ANSI/BHMA A156.6	(2015) Architectural Door Trim
ANSI/BHMA A156.7	(2016) Template Hinge Dimensions
ANSI/BHMA A156.8	(2015) Door Controls - Overhead Stops and Holders
ANSI/BHMA A156.16	(2018) Auxiliary Hardware
ANSI/BHMA A156.18	(2016) Materials and Finishes

NATIONAL FIRE PROTECTION ASSOCIATION (NFPA)

NFPA 70	(2020; ERTA 20-1 2020; ERTA 20-2 2020; TIA 20-1; TIA 20-2; TIA 20-3; TIA 20-4) National Electrical Code
NFPA 101	(2021) Life Safety Code

UNDERWRITERS LABORATORIES (UL)

UL 10B	(2008; Reprint May 2020) Fire Tests of

	Door Assemblies
UL 228	(2006; Reprint Nov 2008) Door Closers-Holders, With or Without Integral Smoke Detectors
UL 437	(2013; Reprint Oct 2017) UL Standard for Safety Key Locks
UL 634	(2007; Reprint Mar 2015) Connectors and Switches for Use with Burglar-Alarm Systems
UL 1034	(2011; Reprint Jun 2020) Burglary-Resistant Electric Locking Mechanisms

1.2 SUBMITTALS

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NOTE: Review Submittal Description (SD) definitions in Section 01 33 00 SUBMITTAL PROCEDURES and edit the following list, and corresponding submittal items in the text, to reflect only the submittals required for the project. The Guide Specification technical editors have classified those items that require Government approval, due to their complexity or criticality, with a "G". Generally, other submittal items can be reviewed by the Contractor's Quality Control System. Only add a "G" to an item if the submittal is sufficiently important or complex in context of the project.

For Army projects, fill in the empty brackets following the "G" classification, with a code of up to three characters 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.

The "S" classification indicates submittals required as proof of compliance for sustainability Guiding Principles Validation or Third Party Certification and as described in Section 01 33 00 SUBMITTAL PROCEDURES.

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

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Government approval is required for submittals with a "G" or "S" classification. Submittals not having a "G" or "S" classification are [for Contractor Quality Control approval.][for information only. When used, a code following the "G" classification identifies the office that

will review the submittal for the Government.] Submit the following in accordance with Section 01 33 00 SUBMITTAL PROCEDURES:

SD-01 Preconstruction Submittals

Detention hardware schedule

SD-02 Shop Drawings

Type 1 lock

Type 3 lock

Door position switches

Detention hinges

Submit complete system wiring diagrams for locks and controls, following approval of the detention hardware schedule. Indicate electrical requirements for locks and controls.

SD-03 Product Data

Keys and cylinders

Detention hinges

Detention locks

Door trim

Door position switches

Security door accessories

Submit details of construction and methods of installation, finishes, sizes, shape, alloy and thickness of materials. Include wiring details and electrical specifications.

SD-10 Operation and Maintenance Data

Detention locks, Data Package 5; G[, [_____]]

DOOR CLOSERS, Data Package 5; G[, [_____]]

Door position switches, Data Package 5; G[, [_____]]

Submit in accordance with Section 01 78 23 OPERATION AND MAINTENANCE DATA.

1.3 QUALITY ASSURANCE

1.3.1 Qualifications of Installer

The work shall be installed by a detention equipment installer approved by the detention hardware manufacturer.

1.3.2 Regulatory Requirements

a. Electrically controlled, monitored, and operated detention hardware and related components shall meet applicable requirements of NFPA 70.

b. Detention hardware for labeled fire doors shall meet applicable requirements of UL 10B and be listed (labeled).

c. Detention hardware for doors that are considered "Means of Egress" shall meet applicable requirements of NFPA 101.

d. Electrically operated detention locks shall meet applicable requirements of UL 1034 and be listed (labeled).

1.3.3 Schedule Requirements

Submit detention hardware schedule at the same time hardware samples are submitted. Schedule shall include quantities, manufacturer's catalog numbers, descriptive information, location, sizes, finish, key control symbols including keying systems for each piece. Use the same door marks as shown on the schedule in the contract documents.

1.4 DELIVERY, STORAGE, AND HANDLING

1.4.1 Keys

Send to the Contracting Officer directly from the manufacturer via registered mail.

1.4.2 Detention Hardware

Deliver in a timely manner and store in accordance with the manufacturer's recommendations. Deliver in manufacturer's original container and protect from damage by weather.

1.5 HARDWARE COORDINATION CONFERENCE

Conduct a hardware coordination conference for hardware and hollow metal work prior to submittals for the purpose of coordinating the interface of materials that are furnished by the participants listed. Require that a representative of the entity responsible for each of the following functions attend the conference. Notify participants a minimum of 5 working days before the conference.

a. Contractor

b. Hollow metal supplier and installer

c. Detention hollow metal supplier and installer

d. Hardware supplier

e. Hardware installer

f. Detention hardware supplier

g. Detention hardware installer

h. Locking control system supplier and installer

i. Electrical contractor

j. Contracting Officer

1.6 MAINTENANCE TOOLS

Furnish six tool holders and bits for each different size and type of screw and fastener.

1.7 TEMPLATES

Furnish templates for door and frame preparation.

PART 2 PRODUCTS

2.1 FINISH

Finish surfaces, painted surfaces and painted items shall be in accordance with ANSI/BHMA A156.18 and as follows:

2.1.1 Painted Surfaces

600.

2.1.2 Finish Surfaces

626 or 630.

2.1.3 Painted Items

689.

2.2 KEYS AND CYLINDERS

ANSI/BHMA A156.5.

2.2.1 Mogul Keys

Keys for pin tumbler locks shall be not less than 73 mm 2 7/8 inches in length, blade shall be 14 mm 9/16 inch wide by 3.2 mm 1/8 inch thick. Handle shall be 25 mm one inch in diameter. Stamp each key with number or letter per code.

2.2.2 Mogul Cylinder

Provide a special "Mogul" cylinder approximately twice the diameter of a commercial mortise lock cylinder with internal parts proportionately larger. Special "Mogul" keys and restricted keying are required. The sale of cut keys and blanks shall be factory regulated to control usage and reproduction. The design shall be wear and pick resistant and shall include a minimum of five stainless steel 4 mm 5/32 inch diameter pin tumblers, stainless steel springs, and stainless steel ball bearings which intermesh with the key and pin tumblers. Cylinder shall conform to UL 437.

2.2.3 Builders Cylinder

Type E09211A. Keys shall be for restricted use. Cylinder shall conform to UL 437.

2.3 KEYING SYSTEM

Keying system shall consist of dissimilar combinations [for each building] with external doors keyed alike; internal corridor doors keyed alike; utility spaces, [wickets, and food passes] keyed alike; each group of cells [or dormitory group] keyed alike but different from other groups. Establish two separate detention key systems; one system shall be for the security Mogul type hardware, and one for the paracentric key system.

2.4 DETENTION HINGES

Provide hinges in accordance with ANSI/BHMA A156.1 and ANSI/BHMA A156.7. Type A8191 HT with stainless steel maximum security pin. Type A8192 HT with stainless steel maximum security pin. The 225 mm 9 inches denotes 4 wire continuous conduction. Screws shall be twist-off or spanner head. Sizing shall be in accordance with standard. Hinges shall be drilled and counter-sunk for proper size machine screws. Use zinc coated hinges on exterior doors with a prime coat. Furnish junction box and mortar shield. Electric hinges shall meet the requirements of UL 634 and be labeled.

2.5 DETENTION LOCKS

2.5.1 Type 1 Lock

Electro-mechanical solenoid operation lock; jamb mounted for use with security hollow metal doors with the following features:

a. Solenoid operated 115 V ac continuous duty.

b. Cylinder operated one or two sides using mogul or builders cylinders.

c. Lock case 10 gage minimum galvanized cold-rolled steel.

d. Latch Bolt 20 mm 3/4 inch throw stainless steel.

e. Bronze or stainless steel face plate.

f. Signal switch for latch bolt and deadlocking bolt.

g. Strike and mounting screws.

h. Push button in frame if on a cell door.

2.5.2 Type 2 Lock

Mechanical deadlock; lever tumbler deadlock for use with security hollow metal doors with the following features:

a. Paracentric key operated one or two sides.

b. Six lever tumblers with spring temper brass/bronze springs.

c. Steel or stainless steel deadbolt with saw resistant insets.

d. Bolt 20 by 50 mm 3/4 by 2 inches with 20 mm 3/4 inch throw.

e. Lock case primed for paint or galvanized.

f. Lock mount plate including escutcheon, mounting screws, and strike.

2.5.3 Type 3 Lock

Electro-mechanical deadlocking latchlock meeting requirements of UL 10B; jamb mounted in 50 mm 2 inch face security hollow metal frame with the following features:

a. Solenoid operated 24 V dc continuous duty.

b. Cylinder operated one or two side using builders cylinder.

c. Structural and working parts stainless steel.

d. Deadlatch 20 mm 3/4 inch throw stainless steel with saw resistant insets.

e. Stainless steel deadlocking bolt, base plate, and strike.

f. Signal switch for lock status.

g. Plug connectors for conductors.

2.5.4 Type 4 Lock

Mortise lock for security hollow metal swinging doors with the following features:

a. Mogul cylinder key operated one or two sides.

b. Cast brass, bronze, or stainless steel bolts. 25 mm One inch throw with saw resistant inserts. Knob operated deadbolt.

c. Armored front adjustable 3 in 50 mm 1/8 in 2 inches.

d. Strike and mounting screws.

e. Snap locks automatically when door is closed.

2.5.5 Type 5 Lock

Mechanical deadlocking latch lock for security hollow metal swinging doors with the following features:

a. Mogul key operated one or two sides.

b. Five lever tumbler with spring temper brass/bronze springs.

c. Steel or stainless steel latchbolt.

d. Lock case primed for paint or galvanized.

e. Lock mounting plate including escutcheon mounting screws and strike.

2.5.6 Type 6 Lock

Mechanical deadlock for use on security hollow metal doors with the following features.

a. Mogul key operated one or two sides.

b. Five lever tumblers with spring tempered brass/bronze screws.

c. Malleable iron case and cover.

d. Bronze deadbolt 20 by 38 by 16 mm 3/4 by 1 1/2 by 5/8 inchthrow.

e. Lock case and cover primed for paint.

f. Lock mounting plate including escutcheon, mounting screws and strike.

2.5.7 Type 7 Lock

Mechanical spring lock for use on chase and access doors with the following features.

a. Mogul key operated one side only.

b. Five lever tumblers with spring temper brass/bronze springs.

c. Malleable iron case and cover.

d. Bolt retracted by key 25 by 12.7 mm with 11 mm one by 1/2 inch with 7/16 inch throw.

e. Lock case and cover primed for paint.

f. Mounting screws and strike.

2.6 DOOR CLOSERS

2.6.1 Type 1 Door Closers

Surface mounted door closer shall conform to test requirements of ANSI/BHMA A156.4, PT 1, Grade 1.

a. C02011: Regular Arm Type

b. C02021: Parallel Arm Type

Closers installed on labeled fire doors shall meet UL 228. Closers shall be non-handed and installed with hex nut and bolts assembly. Exposed screws shall be security type.

2.6.2 Type 2 Door Closer

Concealed overhead closer meeting test as required by ANSI/BHMA A156.4 PT6 Grade 2.

C05032: Concealed Arm and Track - Butt hinge hung

Closers shall be installed in a 100 mm 4 inch head section.

2.7 STRIKES

Mortised strikes shall be compatible with the lock which it serves. Provide dust box and switch to monitor lock bolt where indicated in set numbers.

2.8 DOOR TRIM

2.8.1 Loop Type Pulls

Manganese bronze or stainless steel 200 mm 8 inches center-to-center surface mounted with spanner type screws. Pulls shall be in accordance with ANSI/BHMA A156.6 J401.

2.8.2 Flush Type Pulls

Manganese bronze or stainless steel set for one side or back to back mounting with spanner type screws. Pulls shall be in accordance with ANSI/BHMA A156.6 J403.

2.8.3 Door Stops and Holders

2.8.3.1 Type PH1

In accordance with ANSI/BHMA A156.8 -C01511; overhead concealed slide type. Exposed screws shall be spanner head.

2.8.3.2 Type PH2

In accordance with ANSI/BHMA A156.8 -C02511; overhead surface mounted slide type; attached with hex nut and bolt assemblies. Exposed screws shall be spanner head.

2.8.3.3 Type OH3

In accordance with ANSI/BHMA A156.8 -C08511, overhead surface mounted rod type, attached with hex nut and bolt assemblies. Exposed screws shall be spanner head.

2.8.3.4 Type FS1

In accordance with ANSI/BHMA A156.16 -L02131. Bronze.

2.8.3.5 Type FS2

In accordance with ANSI/BHMA A156.16 -L01371. Bronze.

2.8.3.6 Type FS3

In accordance with ANSI/BHMA A156.16 -L02141-L02161. Bronze. Exposed screw shall be spanner head.

2.9 DEADBOLTS (HEAD AND FOOT BOLT)

Surface mounted and 25 mm one inch diameter with 20 mm 3/4 inch throw. Bolt shall be operated by spanner key case, be malleable iron, or steel with cover. Attachment shall be with spanner head screws.

2.10 DOOR POSITION SWITCHES

2.10.1 Type 1 Door Position Switch

Mechanically mortised door position switch with the following features:

a. Components concealed when door is in closed position.

b. Switch mechanism housing mortises into door frame headers.

c. Galvanized steel actuator arm.

d. Actuator arm track mortises into the top rail of the door.

e. Allows door opening 180 degrees.

f. Switch monitors door position within 20 mm 3/4 inch from the leading edge of the door to the door stop.

g. Unit constructed of brass and plated steel. The exposed face plate galvanized steel.

h. Switch single pole, double throw type with a rating of 5 amps at 125/250 V ac.

i. Color coded wires with a pair of cable connectors.

2.10.2 Type 2 Door Position Switch

A magnetic door position switch for meeting requirements for UL 634 for mounting in head of door to indicate closed door position. Provide the following features:

a. Mortised into door frame header.

b. Potted components.

c. Life expectancy per manufacturer - over 1 million operations.

d. Maximum contact rating:

(1) Current, resistive load - 1 amp.

(2) Power, resistive load - 24 V ac.

e. Maximum current at 24 V ac, resistive load - 1 amp.

2.11 SECURITY DOOR ACCESSORIES

2.11.1 Wall Bumpers

In accordance with ANSI/BHMA A156.16 Type L02101.

2.11.2 Thresholds

Aluminum extrusion minimum thickness 4.4 by 125 mm 0.172 by 5 inches wide by 12 mm 1/2 inch rise with panic stop and vinyl or neoprene insert.

2.11.3 Drip Strip

Extruded galvanized steel strip 64 mm 2 1/2 inches wide with 16 mm 5/8 inch back strip. Attach to shower doors with a continuous weld.

2.11.4 Weatherstrip

Apply for head and jambs, pressure sensitive adhesive silicone rubber seal.

2.12 SCREWS AND FASTENERS

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NOTE: There are several types of "tamper-resistant" fasteners and screws which provide different levels of security. Specify fasteners which will provide the level of security required. Consult detention hardware manufacturers.
****

Comply with detention manufacturer's standard fastening hardware and recommendations for size, type, and material.

2.12.1 Fabrication

Finish exposed fasteners to match hardware fastened. Fabricate fasteners of the same metal as hardware fastened, except use plated brass or stainless steel for fastening aluminum.

2.12.2 Location

Provide spanner head screws and fasteners for exposed hardware.

2.13 TEMPLATE HARDWARE

Hardware to be applied to frames and to doors shall be made to template.

PART 3 EXECUTION

3.1 EXAMINATION

Examine doors, frames, and hardware for damage, defects, and suitability for intended use. Inspect components and adjacent areas of construction for conditions that could be detrimental to the proper operation or performance of the detention hardware.

3.2 INSTALLATION

Sequence and procedures for installation shall be in accordance with detention hardware manufacturer's instructions.

3.3 ADJUSTMENT AND CLEANING

Examine hardware for complete and proper installation. Lubricate bearing surfaces of moving parts. Adjust hinges, locks, and keepers to function properly. Test keys for smooth operation and for conformance to approved keying system. Hardware shall operate freely without binding and be properly aligned. Protect hardware from paint, stains, weather, and other damage until acceptance of the work.

3.4 FIELD QUALITY CONTROL

After hardware has been installed and placed in operating order, conduct performance tests which shall demonstrate to the Contracting Officer that the hardware operates as specified. Remove items that fail to conform to

the requirements specified and replace with new.

3.5 TRAINING

Upon completion of the work and at a time designated by the Contracting Officer, a manufacturer's technical service representative or manufacturer's authorized representative for the locking control system, shall instruct Government personnel in the proper operation, troubleshooting, maintenance, safety, and emergency procedures of the system. The period of instruction shall be four 8-hour sessions. Conduct training at the job site. The Government shall have the option to video tape training sessions. Notify the Contracting Officer at least two weeks in advance.

3.6 HARDWARE SETS

Abbreviations Used in Hardware Sets	
PC	Prime Coat
EC	Solenoid operated continuous duty
MC	Motor operated continuous duty
L	Limit switch tripped by spring bolt
LL	Limit switch tripped by spring bolt and roller bolt
H	Holdback feature
S	Square bolt
K	Knob feature
SHS	Scanner Head Screws
AL	Aluminum
SH-1	
(3)	Type A8191HT hinges by Prime Coat by Spanner Head Screws
(1)	Type 1 lock by keyed 1 side by EMCLL by SHS
(1)	Loop type door pulls
(1)	Flush type pull by SHS
(1)	Wall Bumper by SHS
SH-2	
(3)	Type A8191HT hinges by PC by SHS

(1)	Type 1 lock by keyed 2 sides by EHMLL by SHS
(2)	Loop type door pulls
(1)	Type 1 door position switch by SHS
(1)	Type 1 door closer by AL by SHS
(1)	Wall bumpers by SHS
SH-3	
(3)	Type A8191HT hinges by PC by SHS
(1)	Type 1 lock by keyed 2 sides by EHMLL by SHS
(2)	Loop type door pulls
(1)	Type 1 door position switch by SHS
(1)	Type 1 door closer by AL by SHS
(1)	Threshold
(1)	Weatherstrip
SH-4	
(3)	Type A8191HT hinges by PC by SHS
(1)	Type 1 lock by keyed 2 sides by ELL by SHS
(2)	Loop type door pulls by SHS
(1)	Type 2 door position switch by SHS
(1)	Type 2 door closer by AL by SHS
SH-5	
(3)	Type A8191HT hinges by PC by SHS
(1)	Type 2 locks by keyed 2 sides by PC by SHS
(1)	Type 1 door closer by AL by SHS
(1)	Loop type door pull
(1)	Wall bumper by SHS
SH-6	
(3)	Type A8191HT hinges by PC by SHS

(1)	Type 2 lock by keyed 2 sides by GALV. by SHS
(1)	Loop type door pull
(1)	Type 1 door closer by AL by SHS
(1)	Threshold by AL by SHS
(1)	Weatherstrip by AL by SHS
SH-7	
(3)	Type A8191HT hinges by PC by SHS
(1)	Type 2 lock by keyed 2 sides by PC by SHS
(1)	Mortise strike with dust box and switch for lock bolt monitor by PC by SHS
(1)	Type 1 door position switch by SHS
(1)	Loop type door pull
SH-8	
(5)	Type A8191HT hinges by PC by SHS
(1)	Type A8191HT PC by SHS
(1)	Type 2 lock by keyed 2 sides by PC by SHS
(1)	Mortise strike with dust box and switch for bolt monitor by PC by SHS
(2)	Type 1 door position switch by SHS
(1)	Loop type door pull by SHS by outside active leaf
(1)	Head and Foot bolt by spanner key by receptacles by PC by SHS by inactive leaf
(1)	Threshold by AL by SHS
(1)	Weatherstrip
SH-9	
(3)	Type A8191HT hinges by PC by SHS
(1)	Type 3 lock by keyed 1 side by double face plate by 24VDC by SHS
(1)	Type 1 door position switch by SHS

(1)	Loop type door pull by SHS
(1)	Flush type door pull (inmate side) by SHS
SH-10	
(3)	Type A8191HT hinges by PC by SHS
(1)	Type 4 lock by keyed 2 sides by SHS
(1)	Mortise strike with dust box and switch for bolt monitor by PC by SHS
(1)	Type 2 door position switch by SHS
(1)	Type 2 door closer by AL by SHS
(1)	Wall bumper by SHS
SH-11	
(3)	Type A8191HT hinges by PC by SHS
(1)	Type 6 lock by keyed 1 side by PC by SHS
SH-12	
(3)	Type A8191HT hinges by SHS
(1)	Type 5 lock by keyed 1 side by PC by SHS
(1)	Mortise strike with dust box by PC by SHS
(1)	Loop type door pull by SHS
(1)	Flush type pull by SHS (inmate side)
SH-13	
(3)	Type A8191HT hinges by SHS
(1)	Type 5 lock by keyed 2 sides by PC by SHS
(1)	Mortise strike with dust box and switch for bolt monitor by PC by SHS
(1)	Type 1 door closer
(1)	Type 1 door position switch by SHS
(2)	Loop type door pulls by SHS
(1)	Wall bumper by SHS

SH-14	
(3)	Type A8191HT hinges by SHS
(1)	Type 1 lock by keyed 2 sides by EMCLL by SHS
(2)	Loop type door pull by SHS
(1)	Type 1 door closer by AL by SHS
(1)	Type 1 door position switch by SHS
SH-15	
(3)	Type A8191HT hinges by PC by SHS
(1)	Type 1 lock by keyed 1 side by MCLL by SHS
(1)	Loop type door pull by SHS
(1)	Type 2 door closer by AL by SHS
(1)	Type 2 door position switch by SHS
(1)	Threshold by AL by SHS
(1)	Weatherstripping
SH-16	
(3)	Type A8191HT hinges by PC by SHS
(1)	Type 3 lock by head mount by 24VDC by SHS
(1)	Loop type door pull by SHS (outside)
(1)	Flush type door pull by SHS (inside)
(1)	Type 1 door position switch by SHS
(1)	Type 1 door closer by AL by SHS
(1)	Pushbutton by SHS
SH-17	
(2)	Type A8192HT hinges by PC by SHS
(1)	Type 7 Lock
SH-18	
(3)	Type A8191HT by PC by SHS

(1)	Type 3 lock by keyed 2 sides by double face plate by 24 VDC by SHS
(1)	Type 2 door position switch by SHS
(1)	Loop type door pull by SHS
(1)	Type 1 Closer
SH-19	
(3)	Type A8191HT hinges by SHS
(1)	Type 1 lock by keyed 2 sides by Galvanized EMCLL by SHS
(2)	Loop type pulls by SHS
(1)	Type 1 Door position switch by SHS
(1)	Type 1 closer by AL by SHS
(1)	Weatherstripping

-- End of Section --