PLUMBING ABBREVIATIONS

ABS: ACRYLONITRILE BUTADIENE STYRENE
AC: ALTERNATING CURRENT
ACR: AIR CONDITIONING AND REFRIGERATION
A/E: ARCHITECT/ENGINEER
AFF: ABOVE FINISH FLOOR
AFG: ABOVE FINISH GRADE
AG: AIR GAP
AI: ANALOG INPUT
AISI: AMERICAN IRON AND STEEL INSTITUTE
AO: ANALOG OUTPUT
ASHRAE: AMERICAN SOCIETY OF HEATING REFRIGERATION, AIR CONDITIONING ENGINEERS
ASJ: ALL SERVICE JACKET
ASME: AMERICAN SOCIETY OF MECHANICAL ENGINEERS
ASPE: AMERICAN SOCIETY OF PLUMBING ENGINEERS
ASR: AUTOMATIC SPINKLER RISER
AWG: AMERICAN WIRE GAUGE
BACNET: BUILDING AUTOMATION AND CONTROL NETWORK
BAG: SILVER—COPPER—ZINC BRAZING ALLOY
BAS: BUILDING AUTOMATION SYSTEM
BCUP: SILVER—COPPER—PHOSPHORUS BRAZING ALLOY
BFP: REDUCED PRESSURE BACKFLOW PREVENTER
BHP: BRAKE HORSEPOWER
BTU: BRITISH THERMAL UNIT
BTU/H: BRITISH THERMAL UNIT PER HOUR
BSC: BOROSILICATE GLASS PIPE
C: CELSIUS
CD: COMPACT DISK
CDA: COPPER DEVELOPMENT ASSOCIATION
CGA: COMPRESSED GAS ASSOCIATION
CFM: CUBIC FEET PER MINUTE
CO: CLEANOUT
COR: CONTRACTING OFFICER’S REPRESENTATIVE
CPVC: CHLORINATED POLYVINYL CHLORIDE
CR: CHLOROPRENE
CRS: CORROSION RESISTANT STEEL
CV: CONTROL VALVE
CXA: COMMISSIONING AGENT
DB: DECIBELS
DB(A): DECIBELS (A WEIGHTED)
DOC: DIRECT DIGITAL CONTROL
DFU: DRAINAGE FIXTURE UNITS
DI: DIGITAL INPUT
DIW: DEIONIZED WATER
DISS: DIAMETER INDEX SAFETY SYSTEM
DN: DIAMETER NOMINAL
DO: DIGITAL OUTPUT
DOE: DEPARTMENT OF ENERGY
DVD: DIGITAL VIDEO DISC
DW: DISHWASHER
DVG: DRAWING
DWV: DRAINAGE, WASTE AND VENT
ECC: ENGINEERING CONTROL CENTER AKA BAS
EL: ELEVATION
EPA: ENVIRONMENTAL PROTECTION AGENCY
EPACT: ENERGY POLICY ACT
EPDM: ETHYLENE PROPYLENE DIENE MONOMER
EPT: ETHYLENE PROPYLENE TERPOLYMER
ETO: ETHYLENE OXIDE
EX: EXISTING
F: FAHRENHEIT
FAR: FEDERAL ACQUISITION REGULATIONS
FCO: FLOOR CLEANOUT
FD: FLOOR DRAIN
FDC: FIRE DEPARTMENT (HOSE) CONNECTION
FNPT: FEMALE NATIONAL PIPE THREAD
FOP: FUEL OIL PUMP
FOR: FUEL OIL RETURN
FOS: FUEL OIL SUPPLY
FOV: FUEL OIL VENT
FPM: FLUORELASTOMER POLYMER
FS: FLOW SWITCH
FSK: FOIL—SCRIM—KRAFT FACING
FSS: VA CONSTRUCTION & FACILITIES MANAGEMENT, FACILITY STANDARDS SERVICE
FU: FIXTURE UNITS
# PLUMBING ABBREVIATIONS

<table>
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<tr>
<th>Abbreviation</th>
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<tbody>
<tr>
<td>GAL</td>
<td>GALLON</td>
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<tr>
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<td>HEALTHCARE ENVIRONMENT AND FACILITIES PROGRAM (REPLACEMENT FOR OQAMES)</td>
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<td>VTR</td>
<td>VENT THROUGH ROOF</td>
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**PLUMBING ABBREVIATIONS**

**SCALE:** NONE

**DATE ISSUED:** SEPTEMBER 1, 2020  **CAD DETAIL NO.:** SD220511-04.DWG
DRAWING SYMBOLS

- 2
  PL105
  DETAIL NUMBER
  DRAWING NUMBER WHERE DRAWN

- A
  PL105
  SECTION LETTER
  DRAWING NUMBER WHERE SHOWN

- BUILDING NO. WHERE EQUIPMENT IS LOCATED
  EQUIPMENT ABBREVIATION (PUMP)
  PUMP NO. 3 IN BUILDING NO. 26
  TYPICAL UNIT NO.

- SAN
  1
  RISER SYSTEM
  RISER NUMBER
GENERAL PLUMBING SYMBOLS

↑→ DIRECTION OF PIPE PITCH (DOWN)
→→ DIRECTION OF FLOW
←→ ANCHOR
→↑ REDUCER OR INCREASER
▲ Eccentric Reducer
↓→ TOP CONNECTION, 45' OR 90'
↓↓ BOTTOM CONNECTION, 45' OR 90'
‖ Side Connection
↑ CAPPED OUTLET
→ RISE OR DROP IN PIPE
‖ Union
← PIPE UP
→ PIPE DOWN
□ Point of connection between new and existing work
→ Limit of Demolition
■ Inverted Bucket Trap Set including piping accessories
□ Float & Thermostatic Trap Set including piping accessories
▼ Strainer
→ THERMOMETER
→ PRESSURE GAGE
→ FLOW ELEMENT
∞∞∞ Clean Out
♂♂♂ Hose Bib
PLUMBING VALVE SYMBOLS

- Gate Valve
- Globe Valve
- Gate Valve with 3/4 " Hose Adapter
- Check Valve
- Angle Globe Valve
- Butterfly Valve
- Ball Valve
- Modulating Control Valve
- Two Position Control Valve
- Three-Way Modulating Control Valve
- Three-Way Two Position Control Valve
- Pressure Regulating Valve
- Automatic Flow Control Valve
- Pressure Relief Valve
- Manual Air Vent
- Test Plug (Pressure/Temperature)
- Automatic Air Vent
FLUSHING RIM FLOOR DRAIN "L" CYSTOSCOPY ROOM

ELEVATION

CENTERLINE OF VALVE
1" [25mm] CW
SUPPLY, TYPE "L"
MANUAL OPERATED
FLUSH VALVE

7 1/2" [191mm]
8 1/2" [216mm]
6 1/8" [56mm]
1/2" [12mm]

3/4" [19mm]
1" [25mm] CW
3/8" [11mm]

FLUSHING RIM FLOOR
DRAIN WITH INTEGRAL
DOUBLE WALL TRAP

14-1/2" [363mm]
13" [325mm]
18 1/2" [470mm]

FACE
FLATE
MUD
FLATE

MANUAL OPERATED
FLUSH VALVE
RECESSED
BOX
VACUUM
BREAKER
PUSH
BUTTON
1" [25mm] CW
TO FLOOR
DRAIN, TYPE "L"

WALL

FLUSHING RIM FLOOR DRAIN "L" CYSTOSCOPY ROOM

ENTS

SECTION A
DRAIN STANDPIPE - TO BE UTILIZED FOR HIGH RATE OF DISCHARGE EQUIPMENT SUCH AS WASHING MACHINES, OR TO CREATE ADDED HEAD PRESSURE. (OPTIONAL)

HUB DRAIN

4" [100mm] P-TRAP

TYPE "W" HUB DRAIN WITH STANDPIPE

NTS
NOTE:
SLOPE MEMBRANE LINER 2% TO DRAIN.

TYPE "C" FLOOR DRAIN DETAIL

DETAIL TITLE / TYPE "C" FLOOR DRAIN

SCALE: NONE
DATE ISSUED: SEPTEMBER 1, 2020 CAD DETAIL NO.: SD221300-03.DWG
NOTES:

1. SLOPE MEMBRANE LINER 2% TO DRAIN.

2. PROVIDE FLASHING MEMBRANE WHEN DRAIN IS INSTALLED IN A NON-MEMBRANE FLOOR

TYPE "D" FLOOR DRAIN DETAIL

DETAIL TITLE / TYPE "D" FLOOR DRAIN

SCALE: NONE
DATE ISSUED: SEPTEMBER 1, 2020    CAD DETAIL NO.: SD221300-04.DWG
9" [225mm] DIA. TWO-PIECE NICKEL BRONZE FLASHING STRAINER (FLUSH WITH FINISHED FLOOR)

SEAMLESS VINYL FLOORING

FLASHING MEMBRANE, MIN. 24" [600mm] SQUARE 2 1/2 LB. [1.1kg] TO 4 LB. [1.8 kg] LEAD OR 16 OZ. [453g] COPPER

LOOSE GRAVEL AT WEEP HOLES

FLASHING COLLAR WITH WEEP HOLES

CAULKED, NO-HUB OR THREADED CONNECTION

PROVIDE A METAL SUPPORT PLATE WHEN DRAIN IS INSTALLED IN AN EXISTING FLOOR—CAULK AROUND DRAIN PRIOR TO RE-GROUTING

NOTES:

1. SLOPE MEMBRANE LINER 2% TO DRAIN.

2. PROVIDE FLASHING MEMBRANE WHEN DRAIN IS INSTALLED IN A NON-MEMBRANE FLOOR

TYPE "F" FLOOR DRAIN DETAIL
NOTES:

1. VERTICAL COIL TYPE DOMESTIC WATER HEATER IS SHOWN. IF HORIZONTAL TUBE BUNDLE TYPE IS FURNISHED, PIPING SHALL BE SIMILAR.

2. SEE PLUMBING DRAWINGS FOR PIPING CONNECTIONS.

3. PIPING TO UPPER HEATER HEAD SHOULD BE PROVIDED WITH UNION OR FLANGES, LOCATED OUTSIDE THE OUTER DIAMETER OF HEAD TO FACILITATE REMOVAL OF HEAD AND SHELL.

4. PIPING BETWEEN CONTROL VALVE AND HEATER CONNECTION SHOULD BE AS SHORT AS POSSIBLE.

5. PROVIDE INTEGRAL OR EXTERNAL HEAT TRAPS.

6. PROVIDE HOSE CONNECTION TO DRAIN.

DESIGNER'S NOTES:

ENSURE ENOUGH HEIGHT IS PROVIDED SO CONDENSATE CAN RETURN BY GRAVITY. SIZE END OF MAIN TRAP SET ON FLOOR PLANS. IF STEAM PRESSURE IS 5 PSIG [34 kPa] OR LOWER FURNISH CONTROL AIR FOR CONTROLS. WITH 30 PSIG [206 kPa] STEAM CONTROLS ARE PILOT OPERATED.

CONNECTIONS TO DOMESTIC WATER HEATER
NOTES:

1. ALL STEAM BOOSTER HEATERS REQUIRED BY EQUIPMENT SPECIFICATION SHALL BE PIPED AS SHOWN ABOVE.

2. SEE EQUIPMENT SPECIFICATION AND PLUMBING DRAWINGS FOR PIPING CONNECTIONS.

CONNECTIONS TO DOMESTIC WATER BOOSTER HEATER
HYDRAULIC FLUSH VALVE
12"x12" [300x300mm]
STAINLESS STEEL
ACCESS PANEL WITH
KEY-OPERATED
CYLINDER LOCK

PUSH BUTTON
LOCATION FOR
WATER CLOSET

10"
[250mm]

3/4" [19mm] CONDUIT

GRAB BAR SEE
ARCH. DETAILS

ALTERNATE LOCATION
OF PUSH BUTTON

ALTERNATE LOCATION
OF ACCESS PANEL

FOR FIXTURE HEIGHT
SEE ARCHITECTURAL
DRAWINGS

FINISHED WALL
FINISHED FLOOR

P-111 WATER CLOSET
NTS
P-112 WATER CLOSET DETAIL - SENSOR OPERATED

10"x16" [254x406mm]
STAINLESS STEEL ACCESS DOOR WITH KEY-OPERATED CYLINDER LOCK. MOUNT ELECTRONIC WITHIN. SENSOR & MOR SHALL OPERATE THROUGH ACCESS DOOR.

TRANSFORMER IN JUNCTION BOX
MANUAL OVER-RIDE BUTTON
SENSOR

BACK CHECK ANGLE STOP

GRAB BAR SUPPORT (TYPICAL)
GRAB BAR, SEE ARCH. DRAWINGS

2'-7" [787mm]
2'-9" [838mm]

18" [457mm]

FOR FIXTURE HEIGHTS
SEE ARCHITECTURAL DRAWINGS

FINISHED WALL
FINISHED FLOOR

NTS
P-113 WATER CLOSET DETAIL - SENSOR OPERATED

NOTE:
FURNISH 24 VOLT TRANSFORMER

FOR FIXTURE HEIGHT SEE ARCHITECTURAL DRAWINGS

FINISHED WALL

FINISHED FLOOR

BED PAN WASHER DIVERTER VALVE

ELECTRICAL BOXES
MANUAL OVER-RIDE BUTTON
SENSOR

1/2"
[13mm]

34 3/8" [861mm]

9 1/2"
[238mm]

18"
[450mm]

2 1/4"
[56mm]

2 3/4"
[69mm]

4 3/4"
[119mm]

1" [25mm] STOP

36" [900mm] FROM FLOOR

C/L OF FIXTURE

19"
[475mm]
P-302 PATIENT BATHTUB ROUGH-IN

BATH TUB

SPOUT

4
[100mm]

2'-6"
[750mm]

2'-6"
[750mm]

3'-6"
[1050mm]

2'-0"
[600mm]

6-6"
[1950mm]

1'-6"
[450mm]

2'-6"
[750mm]

3'-6"
[1050mm]

8"
[200mm]

30" [750mm] SLIDE BAR

SEE ARCH. DWGS. FOR GRAB BAR LOCATION

ELEVATED VACUUM BREAKER

SUPPLY ELBOW VACUUM

DIVERTER VALVE

TYPE T/P CONTROL VALVE

DETAIL TITLE / P-302 PATIENT BATHTUB ROUGH-IN

SCALE: NONE

DATE ISSUED: DECEMBER 1, 2015    CAD DETAIL NO.: SD224000-06.DWG
TYPICAL WHEELCHAIR LAVATORY DETAIL

NOTE:
PROVIDE COVER FOR EXPOSED PIPING
NOTE:

PROVIDE AN ADDITIONAL 16 GAGE GALVANIZED STEEL PLATE 12'x16' [300x400mm] SECURED TO A MINIMUM OF 2 STUDS FOR A FOOT PEDAL.

P-505 CLINIC SERVICE SINK ROUGH-IN DETAIL

NTS

Department of Veterans Affairs

SCALE: NONE

DATE ISSUED: DECEMBER 1, 2015 CAD DETAIL NO.: SD224000-09.DWG
P-519 SCRUB SINK – SINGLE COMPARTMENT

NTS

DETAIL/TITLE: P-519 SCRUB SINK – SINGLE COMPARTMENT

SCALE: NONE

DATE ISSUED: FEBRUARY 2017  CADD DETAIL NO.: SD224000-10
P-701 PATIENT SHOWER

NOTE: LINEAR TRENCH DRAIN AT SHOWER ENTRANCE IS AN ACCEPTABLE OPTION.
INSTITUTIONAL SHOWER HEAD

EDGE OF SHOWER

8' x 8' x 3'

200 x 200 x 75 mm

ACCESS BOX

W. S. S. LOCKING DOOR ON OPP. WALL SEE DETAIL AT LEFT

BALL TYPE SHUTOFF VALVE IN BOX

SHOWER CONTROL VALVE TYPE T/P

COMBINATION CHECK-STOP VALVES

FINISHED FLOOR

2'-0"
[600 mm]

2'-9 1/2"
[3'-6"

15"
[375 mm]

1050 mm
[630 mm]

838 mm
[33"

TILE WALL

ALT HANDLE POSITION (CLOSED)

SHUTOFF VALVE

SUPPLY PIPE

S.S. DOOR W/ VANDAL-PROOF LOCK (KEYED)

SECTION A
ACCESS BOX W/ VALVE

P-702 PATIENT SHOWER

DETAIL TITLE / P-702 PATIENT SHOWER

SCALE: NONE

DATE ISSUED: DECEMBER 1, 2015

CAD DETAIL NO.: SD224000-14.DWG
P-711 SHOWER (SPINAL CORD)

(HAND HELD)
P-703 SHOWER (SPINAL CORD)

NTS
REVERSE OSMOSIS WATER SUPPLY

1/2" [13mm] TYPE 316 STAINLESS STEEL COUPLING SEAM WELDED TO BOX

1/2" [13mm] S.S. BALL VALVE

3/4" [19mm] HOSE ADAPTER

DISCHARGE HOSE BRACKET

WATER DAM

INTEGRAL WALL FLANGE 1" [25mm] WIDE TYP.

CROSS BREAK BOTTOM FOR DRAINAGE

WASTE CONNECTION TAILPIECE

1 1/2" [38mm] CRP

8x8 STAINLESS STEEL ACCESS PANEL

FINISHED FLOOR

(P-809) DIALYSIS BOX DETAIL

NTS
P-810 STEAM AND WATER MIXING VALVE DETAIL

#

STEAM PRESSURE REDUCING VALVE
SET AT 30 PSIG [207kPa] MAX.

1" [25mm]

3/4" [19mm]

STOP & CHECK VALVE
UNION

THERMOSTATIC MIXING VALVE

THERMOMETER
(20°–240°F
[-6°–116°C])

VACUUM BREAKER

HOSE CONNECTION
PROVIDE 35'
[10,500mm] HOSE
WITH NOZZLE

HOSE RACK

[600mm]

[1200mm]

24" [600mm]

48" [1200mm]

FINISHED FLOOR

NTS

DETAIL TITLE / P-810 STEAM & WATER MIXING VALVE DETAIL

SCALE: NONE

DATE ISSUED: DECEMBER 1, 2015          CAD DETAIL NO.:  SD224000-18.DWG
RECESSED FLUSH VALVE FOR FLOOR DRAIN, WITH VACUUM BREAKER

FINISHED FLOOR
EXHAUST DUCT BY HVAC CONTR.
3" [75mm] FD "J OR L"

3/4" [19mm]

1" [25mm]
3/8" [11mm]

2" [50mm]

VACUUM BREAKER (PRESSURE TYPE)

NOTE:
SOME LOCAL CODES MAY REQUIRE REDUCED PRESSURE BACKFLOW PREVENTION DEVICES

5'-0" [1500mm]

1" [25mm] TO SINK OR SPRAY UNIT
2" [50mm]

BRANCH MAIN

NOTE:
DISPOSER IS AN OPTION FOR THIS FIXTURE

(ME-812) AUTOPSY TABLE PIPING DETAIL

NTS
INSTEAD OF USING A DOUBLE NUT – A PIPE SLEEVE OVER ROD MAY BE USED

HANGER ROD SUPPORT FOOT

BOLT TO FLOOR (TYPICAL)

INSTALLATION OF HANGER SUPPORT FOOT

DATE ISSUED: DECEMBER 1, 2015
CADD DETAIL NO.: SD224000-20.DWG
MINIMUM 16 GAGE GALVANIZED STEEL PLATE 12"x48" [300x1200mm] MIN. SECURED TO A MIN. 4 STUDS PER LAVATORY

MIN. 5 1 1/4" [131mm]Ø GALV. MACHINE BOLTS WELDED TO PLATE
MIN. (3) 1 1/4" [6mm] MACHINE BOLTS W/DOUBLE LOCK NUTS ON BACK SIDE

1/4" [6mm]Ø MOLLY BOLT HOLLOW WALL ANCHOR (1 EA. SIDE OF LAV)

NOTE:

1. AT LAVS WITH FOOT PEDAL CONTROLS PROVIDE AN ADDITIONAL 16 GAGE GALVANIZED STEEL PLATE 12"x16" [300x600mm] SECURED TO A MINIMUM OF 2 STUDS PER FOOT PEDAL
2. PROVIDE 20 GAGE STUDS WHEN HEIGHT EXCEEDS 12'-0" [3600mm]

STEEL HANGER BY LAV MFG
FOR FIXTURE HEIGHT SEE ARCHITECTURAL DRAWINGS

LAVATORY MOUNTING DETAIL

SCALE: NONE

DATE ISSUED: DECEMBER 1, 2015 CAD DETAIL NO.: SD224000-21.DWG
HANGER ROD SUPPORT FOOT

SCALE: NONE

DATE ISSUED: DECEMBER 1, 2015   CADD DETAIL NO.: SD224000-22.DWG
## DENTAL AIR (DA) ALARM PANEL SCHEDULE

<table>
<thead>
<tr>
<th>LOCATION</th>
<th>TYPE OF PANEL</th>
<th>GAGES</th>
<th>SERVICE INDICATOR LIGHTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>BOILER PLANT CONTROL OFFICE -OR-</td>
<td>MASTER (SYSTEM) ALARM</td>
<td>NO</td>
<td>DENTAL AIR (DA) DEW POINT HIGH</td>
</tr>
<tr>
<td>ENGINEERING CONTROL CENTER (ECC) -OR-</td>
<td>PANEL</td>
<td></td>
<td>DA FILTER PRESS DROP HIGH</td>
</tr>
<tr>
<td>OTHER LOCATION WITH ENGINEERING PERSONNEL</td>
<td></td>
<td></td>
<td>DA HIGH TEMP SHUTDOWN</td>
</tr>
<tr>
<td>SUPERVISION -AND- DENTAL RECEPTION AREA</td>
<td></td>
<td></td>
<td>DA LOW LUBRICANT</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>DA CARBON MONOXIDE LEVEL HIGH</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>DA LINE PRESSURE LOW</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>DA LINE PRESSURE HIGH</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>DESICCANT DRYER MALFUNCTION</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>TEST BUTTON</td>
</tr>
</tbody>
</table>

### NOTES TO DESIGNER:

1. LOCATE MASTER ALARM PANELS IN CONFORMANCE WITH INDIVIDUAL MEDICAL CENTER'S OPERATING PRACTICES FOR CRITICAL ALARM LOCATIONS.

2. INDICATE ROOM NUMBERS WHERE PANELS ARE TO BE LOCATED.
## MEDICAL GAS ALARM PANEL SCHEDULE

<table>
<thead>
<tr>
<th>LOCATION</th>
<th>TYPE OF PANEL</th>
<th>GAGES</th>
<th>SERVICE INDICATOR LIGHTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>BOILER PLANT CONTROL OFFICE -OR- ENGINEERING CONTROL CENTER (ECC) -OR- OTHER LOCATION WITH ENGINEERING PERSONNEL SUPERVISION -AND- INTENSIVE CARE NURSING -OR- FIRE STATION -OR- PHONE SWITCHBOARD -OR- SECURITY OFFICE</td>
<td>MASTER (SYSTEM) ALARM PANEL</td>
<td>NO</td>
<td>LIQUID OXYGEN LEVEL LOW OXYGEN RESERVE SWITCHOVER OXYGEN RESERVE IN USE OXYGEN RESERVE LOW LIQUID LEVEL OXYGEN RESERVE PRESSURE LOW OXYGEN MAIN LINE PRESSURE LOW OXYGEN MAIN LINE PRESSURE HIGH NITROUS OXIDE CHANGE OVER TO SECONDARY NITROUS OXIDE RESERVE IN USE NITROUS OXIDE MAIN LINE PRESSURE LOW NITROUS OXIDE MAIN LINE PRESSURE HIGH NITROGEN CHANGE OVER TO SECONDARY NITROGEN RESERVE IN USE NITROGEN MAIN LINE PRESSURE LOW NITROGEN MAIN LINE PRESSURE HIGH MEDICAL AIR DEWPOINT HIGH MA COMPRESSOR MALFUNCTION MEDICAL AIR MAIN LINE PRESSURE LOW MEDICAL AIR MAIN LINE PRESSURE HIGH MA SYSTEM CARBON MONOXIDE HIGH DESICCANT DRYER MALFUNCTION DESICCANT DRYER POST FILTER DIRTY DESICCANT DRYER INLET FILTER DIRTY MAIN LINE FILTER BANK DIRTY MA REFRIGERATED DRYER POST FILTER DIRTY AFTER COOLER HIGH AIR TEMPERATURE MEDICAL VACUUM LINE VACUUM LOW MEDICAL VACUUM FILTER BACK PRESSURE TEST BUTTON</td>
</tr>
</tbody>
</table>

| SURGERY CONTROL ROOM | AREA ALARM PANEL | YES | OXYGEN LINE PRESSURE ABNORMAL NITROUS OXIDE LINE PRESSURE ABNORMAL NITROGEN LINE PRESSURE ABNORMAL MEDICAL AIR LINE PRESSURE ABNORMAL MEDICAL VACUUM LINE VACUUM LOW TEST BUTTON |

| RECOVERY ROOMS CRITICAL CARE AREAS EMERGENCY AREAS PATIENT AREAS | AREA (ZONE) ALARM PANEL | YES | OXYGEN LINE PRESSURE ABNORMAL NITROUS OXIDE LINE PRESSURE ABNORMAL NITROGEN LINE PRESSURE ABNORMAL MEDICAL AIR LINE PRESSURE ABNORMAL MEDICAL VACUUM LINE VACUUM LOW TEST BUTTON |

### DESIGNER’S NOTES:

1. LOCATE MASTER ALARM PANELS IN CONFORMANCE WITH INDIVIDUAL MEDICAL CENTER OPERATING PRACTICES FOR CRITICAL ALARM LOCATIONS.

2. INDICATE ROOM NUMBERS WHERE PANELS ARE TO BE LOCATED.

3. ADD ADDITIONAL MIXED GAS ALARMS AS REQUIRED TO THE MASTER AND AREA ALARM PANELS.
## MEDICAL GAS ALARM PANEL SCHEDULE, CONTINUED

<table>
<thead>
<tr>
<th>LOCATION</th>
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<th>GAGES</th>
<th>SERVICE INDICATOR LIGHTS</th>
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<td>MASTER (SYSTEM) ALARM PANEL</td>
<td>NO</td>
<td>CARBON DIOXIDE MAIN LINE PRESSURE HIGH&lt;br&gt;CARBON DIOXIDE MAIN LINE PRESSURE LOW&lt;br&gt;CARBON DIOXIDE CHANGEOVER TO SECONDARY SUPPLY&lt;br&gt;CARBON DIOXIDE MAIN SUPPLY LESS THAN 1 DAY (LOW CONTENTS)&lt;br&gt;CARBON DIOXIDE RESERVE IN USE&lt;br&gt;CARBON DIOXIDE RESERVE SUPPLY LESS THAN 1 DAY (LOW CONTENTS)&lt;br&gt;CARBON DIOXIDE RESERVE PRESSURE LOW (NOT FUNCTIONAL)&lt;br&gt;MEDICAL AIR PRODUCTION STOP&lt;br&gt;MEDICAL AIR CHANGEOVER TO SECONDARY SUPPLY&lt;br&gt;OXYGEN CHANGE OVER TO SECONDARY SUP.&lt;br&gt;OXYGEN MAIN SUPPLY LESS THAN 1 DAY (LOW CONTENTS)&lt;br&gt;OXYGEN RESERVE SUPPLY LESS THAN 1 DAY (LOW CONTENTS)&lt;br&gt;NITROUS OXIDE MAIN SUPPLY LESS THAN 1 DAY (LOW CONTENTS)&lt;br&gt;NITROUS OXIDE RESERVE SUPPLY LESS THAN 1 DAY (LOW CONTENTS)&lt;br&gt;NITROUS OXIDE RESERVE PRESSURE LOW (NOT FUNCTIONAL)&lt;br&gt;MEDICAL—SURGICAL MAIN LINE VACUUM LOW&lt;br&gt;WAGD MAIN LINE VACUUM LOW&lt;br&gt;INSTRUMENT AIR CYLINDER RESERVE IN USE&lt;br&gt;INSTRUMENT AIR CYLINDER RESERVE LESS THAN 1 HOUR SUPPLY&lt;br&gt;NITROGEN MAIN SUPPLY LESS THAN 1 DAY (LOW CONTENTS)&lt;br&gt;NITROGEN RESERVE SUPPLY LESS THAN 1 DAY (LOW CONTENTS)&lt;br&gt;NITROUS OXIDE RESERVE PRESSURE LOW</td>
</tr>
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</table>

**DESIGNER’S NOTES:**

1. LOCATE MASTER ALARM PANELS IN CONFORMANCE WITH INDIVIDUAL MEDICAL CENTER OPERATING PRACTICES FOR CRITICAL ALARM LOCATIONS.

2. INDICATE ROOM NUMBERS WHERE PANELS ARE TO BE LOCATED.

3. ADD ADDITIONAL MIXED GAS ALARMS AS REQUIRED TO THE MAIN AND AREA ALARM PANELS.

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**DATE ISSUED:** DECEMBER 1, 2015  
**CAD DETAIL NO.:** SD226200-02.DWG
GALVANIZED STEEL LIQUID SEPARATOR TANKS WITH AUTO PUMP AND ELECTRIC SURGE CONTROL (ALSO AVAILABLE WITH SOLENOID CONTROL)

PARTS LIST

<table>
<thead>
<tr>
<th>ITEM NO.</th>
<th>PART NO.</th>
<th>DESCRIPTION</th>
<th>ITEM NO.</th>
<th>PART NO.</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>DCP</td>
<td>DUPLEX ELEC. MOTOR MOTOR CONTROL PANEL</td>
<td>8</td>
<td>ABV</td>
<td>THROTTLING VALVE</td>
</tr>
<tr>
<td>2</td>
<td>AIP</td>
<td>ISOLATOR PAD</td>
<td>9</td>
<td>SLG</td>
<td>CYCLONIC LIQUID SEPARATOR</td>
</tr>
<tr>
<td>3</td>
<td>TET</td>
<td>TURBO EXHAUSTER</td>
<td>10</td>
<td>FSA</td>
<td>ELECTRONIC LIQUID LEVEL SENSOR (OPT)</td>
</tr>
<tr>
<td>4</td>
<td>ASV</td>
<td>MECHANICAL ANTI-SURGE VALVE</td>
<td>11</td>
<td>SV-300</td>
<td>SOLENOID VALVE ELECTRONIC LIQUID LEVEL</td>
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<tr>
<td>5</td>
<td>AEX</td>
<td>AIR DISCHARGE SILENCER</td>
<td>12</td>
<td>AF-300</td>
<td>SOLID STATE AUTO-FLUSH ASSEMBLY</td>
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<tr>
<td>6</td>
<td>RPL</td>
<td>FLEXIBLE PLUMBING ISOLATOR</td>
<td>13</td>
<td>ACV</td>
<td>CHECK VALVE</td>
</tr>
<tr>
<td>7</td>
<td>ACV</td>
<td>DIRECTIONAL FLOW CHECK VALVE</td>
<td>14</td>
<td>ACV</td>
<td>DIRECTIONAL FLOW VALVE</td>
</tr>
</tbody>
</table>

ORAL EVACUATION SYSTEM PIPING DETAIL
# LABORATORY GAS ALARM PANEL SCHEDULE

<table>
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<td>MASTER (SYSTEM)</td>
<td>NO</td>
<td>LA AIR DEW POINT HIGH LA AIR CARBON MONOXIDE HIGH LA AIR DESICCANT DRYER MALFUNCTION LA AIR DESICCANT DRYER POST FILTER DIRTY LA REFRIGERATED DRYER POST FILTER DIRTY LA AIR COMPRESSOR MALFUNCTION LA AFTERCOOLER HIGH TEMP LA DESICCANT DRYER INLET FILTER DIRTY LA MAIN LINE FILTER BANK DIRTY LA PRESSURE HIGH LA PRESSURE LOW LA VACUUM FILTER BACKPRESSURE LA VACUUM LINE VACUUM LOW (SPECIAL GAS) LINE PRESSURE LOW (SPECIAL GAS) LINE PRESSURE HIGH TEST BUTTON</td>
</tr>
</tbody>
</table>

**NOTES TO DESIGNER:**

1. LOCATE MASTER ALARM PANELS IN CONFORMANCE WITH INDIVIDUAL MEDICAL CENTER’S OPERATING PRACTICES FOR CRITICAL ALARM LOCATIONS.

2. INDICATE ROOM NUMBERS WHERE PANELS ARE TO BE LOCATED.