

Section 7

Design Guide Plates and Data Sheets

Containment Suites

GUIDE PLATE SERIES

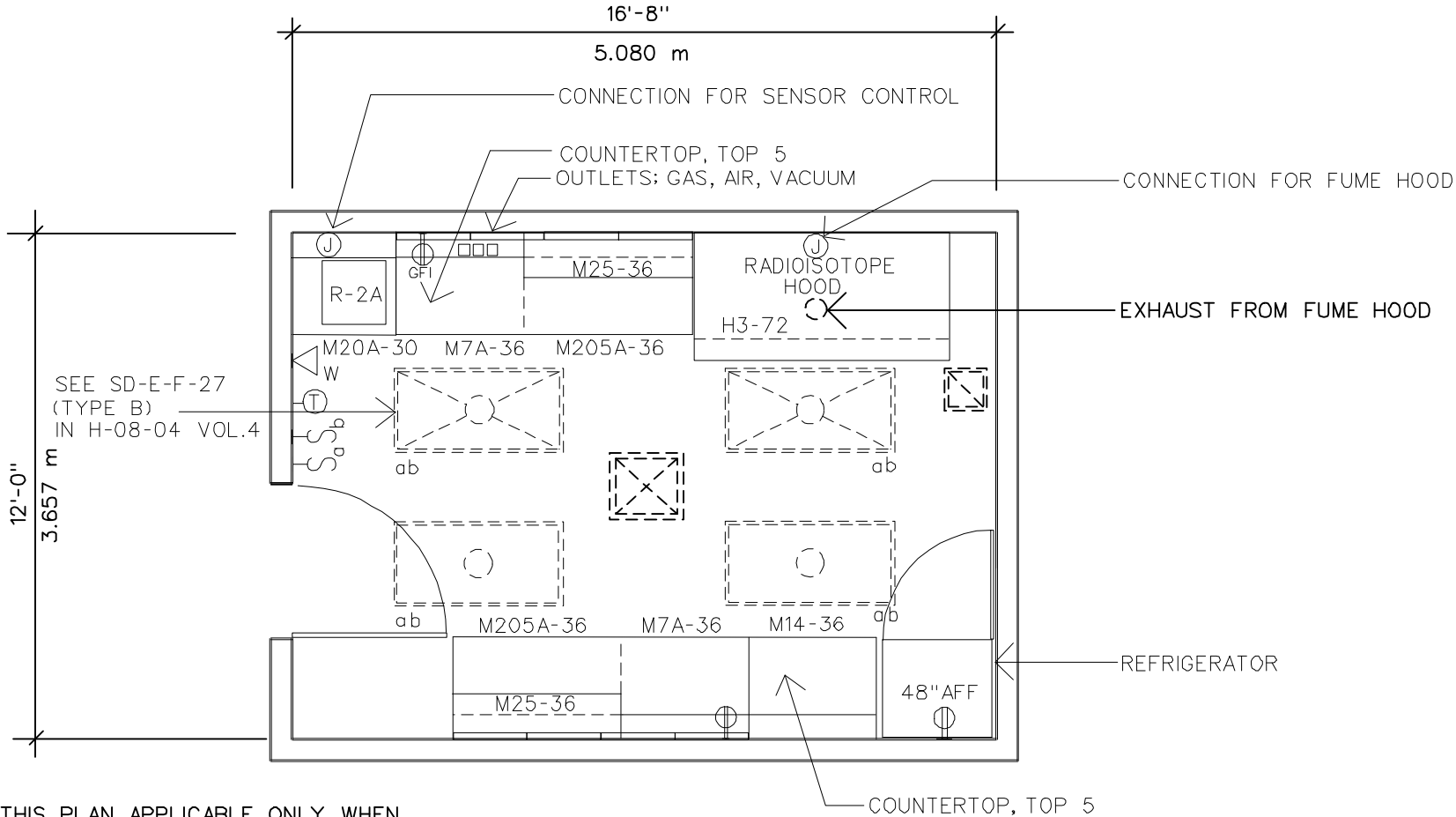
- 7-1Procedural Laboratory
(Chemical/Radioisotope Suite)
Equipment and Utility Plan
Design Standards
Equipment Guide List

- 7-2Procedural Laboratory (Infectious Disease
Suite)
Design Standards
Equipment Guide List

- 7-3Procedural Laboratory (Barrier Suite)
Design Standards
Equipment Guide List

- 7-4Hazardous Waste Disposal Room
Equipment and Utility Plan
Design Standards
Equipment Guide List

26 February 1993



NOTE: THIS PLAN APPLICABLE ONLY WHEN ROOM IS APPROVED BY VHA

NOTE: FOR PROCEDURAL LAB (INFECTIOUS) REPLACE H3-72 WITH H12-54/78, AND INCLUDE AN INCUBATOR

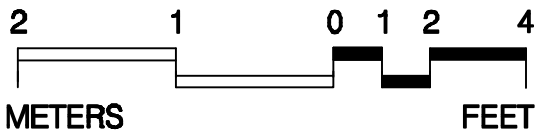
NOTE: FOR PROCEDURAL LAB (BARRIER) REPLACE H3-72 WITH H12-54/78

NOTE: FOR ALL M, H AND R EQUIPMENT SEE H-08-06

NOTE: OUTLETS AT COUNTER LOCATION ARE 48" ABOVE FINISHED FLOOR

200 NSF
18.580 m²

Procedural Laboratory (Chemical/Radioisotope)



Equipment & Utility Plan

Procedural Laboratory (Chemical/Radioisotope Suite)

Design Standards

ARCHITECTURAL

Floor Area	200 NSF	Wall Finish	CMU (SC)
Ceiling	PCP	Wainscot	-
Ceiling Height	9'-0"	Base	ERF
Slab Depression	-	Floor Finish	ERF
Notes:		Lead Lining	-

SPECIAL EQUIPMENT

H3-72 RADIOISOTOPE HOOD
REFRIGERATOR

ELECTRICAL

Lighting

General	70 FC, 3.5 W/SF*
Special	-
Emergency	50% GEN FLUOR

Notes:
*COLOR CORRECTED FLUOR LAMPS

Power

General	1080 W
Special	**
Emergency	**

**H3: 600 W; REFRIGERATOR: 1200 W; EMERGENCY CIRCUIT

COMMUNICATIONS

Telephone	WALL MTD	ADP	EMPTY CONDUIT
Intercom	PART OF TELEPHONE	Radio	-
Public Address	-	Other	-

Notes:

HEATING, VENTILATING AND AIR CONDITIONING

AC Load Lights	4.0 W/SF
AC Load Equipment	5.2 W/SF
Number of People	3
Noise Criteria	NC-40
Room Pressure	NEGATIVE
Dry Bulb Temp Cooling (F)	78
Dry Bulb Temp Heating (F)	72
Minimum Air Changes per Hour	15 (SA)
Minimum % Outside Air	100
100% Exhaust Air	YES
Special Exhaust	YES*
Steam	-
Relative Humidity - Cooling	50 %
Relative Humidity - Heating	30 %

Notes:
*H3: 1375 CFM, 0.375" PD; SEE H-08-4 SD 673.5

PLUMBING AND MEDICAL GASES

Sanitary Drain	YES	Cold Water	YES
Acid Waste	YES	Hot Water	YES
Silver Recovery	-	Reagent Water	-
Medical Air	-	Laboratory Air	YES
Medical Vacuum	-	Laboratory Vacuum	YES
Oxygen	-	Fuel Gas	YES
Nitrous Oxide	-	Anesthesia Evac	-

Notes:
H3: LAB AIR, LAB VACUUM, FUEL GAS, COLD WATER, ACID WASTE

Procedural Laboratory (Chemical/Radioisotope Suite)

Equipment Guide List

SYMBOL	QTY	AI	DESCRIPTION
NOTE: ALL LABORATORY FURNITURE SYMBOLS PREFIXED BY "M" SHALL BE INTERCHANGABLE SUSPENSION SYSTEM TYPE.			
TOP 5	1	CF	COUNTERTOP, CORROSION RESISTING (STAINLESS) STEEL, RAISED RIM, WITH INTEGRAL SINK AND SPLASHBACKS (H-08-1 & H-08-6, MCS 11602)
R-2A	1	CF	SINK, CORROSION RESISTING (STAINLESS) STEEL, WITH END OR CORNER DRAIN OUTLET, WITH OR WITHOUT DRAINBOARD AND SENSOR CONTROL, 18" X 18" X 16" DEEP (H-08-1 & H-08-6, MCS 11602)
M20/20A	1	CF	CABINET, UNDERCOUNTER, SINK UNIT, 2 HINGED PANEL DOORS, AVAILABLE WIDTHS 30", 36", 42", 48"; DEPTH 22"; HEIGHTS 31", 25" (H-08-1 & H-08-6, MCS 12346)
M205/205A	2	CF	CABINET, UNDERCOUNTER, 6/5 DRAWERS, WITH LOCK AND KEY, AVAILABLE WIDTHS 36", 48"; DEPTH 22"; HEIGHTS 31", 25" (H-08-1 & H-08-6, MCS 12346)
			-OR-
M202/202A	2	CF	CABINET, UNDERCOUNTER, 7/6 DRAWERS, WITH LOCK AND KEY, AVAILABLE WIDTHS 36", 48"; DEPTH 22"; HEIGHTS 31", 25" (H-08-1 & H-08-6, MCS 12346)
M7/7A	2	CF	CABINET, UNDERCOUNTER, WITH 2 HINGED DOORS AND 2/1 ADJUSTABLE SHELVES, WITH LOCK AND KEY, AVAILABLE WIDTHS 36", 48"; DEPTH 22"; HEIGHTS 31", 25" (H-08-1 & H-08-6, MCS 12346)
M14	AR	CF	TABLE FRAME, WITH DRAWER(S), KNEE SPACE UNIT, AVAILABLE WIDTHS AS REQUIRED, DEPTH 22"; HEIGHT 31" (H-08-1 & H-08-6, MCS 12346)
M25	2	CF	CABINET, WALL, WITH SLOPING TOP, 2 GLAZED SLIDING DOORS AND 2 ADJUSTABLE SHELVES, WITH LOCK AND KEY, AVAILABLE WIDTHS 30", 36", 42", 48"; DEPTH 13"; HEIGHT 30" (H-08-1 & H-08-6, MCS 12346)
H3-72	1	CC	FUME HOOD, RADIOISOTOPE, STAINLESS STEEL INTERIOR WITH CABINET BASE, 2 EACH, WATER, AIR, GAS, VACUUM, ELECTRIC DUPLEX OUTLETS AND CUP SINKS, BASE TO SUPPORT SUPERSTRUCTURE PLUS 200 POUNDS PER SQUARE FOOT, 72"W X 36"D X 84"H (H-08-1 & H-08-6, MCS 11610)
	1	CC	OUTLETS, ONE EACH, AIR, GAS AND VACUUM GROUPED OVER COUNTER (H-08-1 & H-08-6, MCS 11602)
	AR	CC	CONNECTIONS, PLUMBING, ELECTRICAL OR MECHANICAL AS REQUIRED
	AR	CC	RECEPTACLE, ELECTRICAL, DUPLEX, 120 VOLT, 20 AMP, STRIP MOLD WITH OUTLETS ON 24" CENTERS, 9" ABOVE COUNTER (H-08-1, MCS 16140; H-08-3, CS 801-3)
	1	VV	REFRIGERATOR, DOMESTIC TYPE, 15 CU. FT., APPROX. 31"W X 28"D X 66"H, 120 VOLT, 20 AMP
	AR	CC	RECEPTACLE, ELECTRICAL, DUPLEX, 120 VOLT, 20 AMP (H-08-1, MCS 16140; H-08-3, CS 801-3)

Procedural Laboratory (Infectious Disease Suite)

Design Standards

ARCHITECTURAL

Floor Area	200 NSF	Wall Finish	CMU (SC)
Ceiling	PCP	Wainscot	-
Ceiling Height	9'-0"	Base	ERF
Slab Depression	-	Floor Finish	ERF
Notes:		Lead Lining	-

SPECIAL EQUIPMENT

H12-54/78 FUME HOOD

ELECTRICAL

Lighting

General	70 FC, 3.5 W/SF*
Special	-
Emergency	50% GEN FLUOR

Notes:
*COLOR CORRECTED FLUOR LAMPS

Power

General	1080 W
Special	**
Emergency	**

**H12: 600 W; REFRIGERATOR: 1200 W; EMERGENCY CIRCUIT

COMMUNICATIONS

Telephone	WALL MTD	ADP	EMPTY CONDUIT
Intercom	PART OF TELEPHONE	Radio	-
Public Address	-	Other	-

Notes:

HEATING, VENTILATING AND AIR CONDITIONING

AC Load Lights	4.0 W/SF
AC Load Equipment	5.2 W/SF
Number of People	3
Noise Criteria	NC-40
Room Pressure	NEGATIVE
Dry Bulb Temp Cooling (F)	78
Dry Bulb Temp Heating (F)	72
Minimum Air Changes per Hour	15 (SA)
Minimum % Outside Air	100
100% Exhaust Air	YES
Special Exhaust	YES*
Steam	-
Relative Humidity - Cooling	50 %
Relative Humidity - Heating	30 %

Notes:
*H12: SEE H-08-4 SD624.6, HVAC DESIGN MANUAL FOR CAPACITY

PLUMBING AND MEDICAL GASES

Sanitary Drain	YES	Cold Water	YES
Acid Waste	YES	Hot Water	YES
Silver Recovery	-	Reagent Water	-
Medical Air	-	Laboratory Air	YES
Medical Vacuum	-	Laboratory Vacuum	YES
Oxygen	-	Fuel Gas	YES
Nitrous Oxide	-	Anesthesia Evac	-

Notes:
H12:LAB AIR, LAB VACUUM, FUEL GAS, COLD WATER, ACID WASTE

Procedural Laboratory (Infectious Disease Suite) Equipment Guide List

SYMBOL	QTY	AI	DESCRIPTION
			NOTE: ALL LABORATORY FURNITURE SYMBOLS PREFIXED BY "M" SHALL BE INTERCHANGABLE SUSPENSION SYSTEM TYPE.
TOP 5	1	CF	COUNTERTOP, CORROSION RESISTING (STAINLESS) STEEL, RAISED RIM, WITH INTEGRAL SINK AND SPLASHBACKS (H-08-1 & H-08-6, MCS 11602)
R-2A	1	CF	SINK, CORROSION RESISTING (STAINLESS) STEEL, WITH END OR CORNER DRAIN OUTLET, WITH OR WITHOUT DRAINBOARD AND SENSOR CONTROL, 18" X 18" X 16" DEEP (H-08-1 & H-08-6, MCS 11602)
M20/20A	1	CF	CABINET, UNDERCOUNTER, SINK UNIT, 2 HINGED PANEL DOORS, AVAILABLE WIDTHS 30", 36", 42", 48"; DEPTH 22"; HEIGHTS 31", 25" (H-08-1 & H-08-6, MCS 12346)
M205/205A	2	CF	CABINET, UNDERCOUNTER, 6/5 DRAWERS, WITH LOCK AND KEY, AVAILABLE WIDTHS 36", 48"; DEPTH 22"; HEIGHTS 31", 25" (H-08-1 & H-08-6, MCS 12346)
			-OR-
M202/202A	2	CF	CABINET, UNDERCOUNTER, 7/6 DRAWERS, WITH LOCK AND KEY, AVAILABLE WIDTHS 36", 48"; DEPTH 22"; HEIGHTS 31", 25" (H-08-1 & H-08-6, MCS 12346)
M7/7A	2	CF	CABINET, UNDERCOUNTER, WITH 2 HINGED DOORS AND 2/1 ADJUSTABLE SHELVES, WITH LOCK AND KEY, AVAILABLE WIDTHS 36", 48"; DEPTH 22"; HEIGHTS 31", 25" (H-08-1 & H-08-6, MCS 12346)
M14	AR	CF	TABLE FRAME, WITH DRAWER(S), KNEE SPACE UNIT, AVAILABLE WIDTHS AS REQUIRED, DEPTH 22"; HEIGHT 31" (H-08-1 & H-08-6, MCS 12346)
M25	2	CF	CABINET, WALL, WITH SLOPING TOP, 2 GLAZED SLIDING DOORS AND 2 ADJUSTABLE SHELVES, WITH LOCK AND KEY, AVAILABLE WIDTHS 30", 36", 42", 48"; DEPTH 13"; HEIGHT 30" (H-08-1 & H-08-6, MCS 12346)
H12-54/78	1	CC	CABINET, AIR FLOW, BIOLOGICAL WITH AIR, GAS AND VACUUM OUTLETS, 120 VOLT, 20 AMP, RECEPTACLE (H-08-1 & H-08-6, MCS 11604)
			NOTE: THE TYPE (B1, B2 OR B3) OF CLASS II BIOLOGICAL SAFETY CABINET REQUIRED WILL BE DETERMINED ON AN INDIVIDUAL PROJECT BASIS BY RESEARCH SERVICE AT THE MEDICAL CENTER. REFER TO GENERAL INFORMATION 21.
			-OR-
			NOTE: THE FOLLOWING BIOLOGICAL SAFETY CABINET IS REQUIRED WHEN HIGH RISK (CLASS IV OR V) MICROORGANISMS ARE USED IN STUDIES.
	1	CC	CABINET, BIOLOGICAL SAFETY, CLASS III
	AR	CC	CONNECTIONS, PLUMBING, ELECTRICAL OR MECHANICAL AS REQUIRED
	AR	CC	RECEPTACLE, ELECTRICAL, DUPLEX, 120 VOLT, 20 AMP, STRIP MOLD WITH OUTLETS ON 24" CENTERS, 9" ABOVE COUNTER (H-08-1, MCS 16140; H-08-3, CS 801-3)
	1	VV	REFRIGERATOR, DOMESTIC TYPE, 15 CU. FT., APPROX. 31"W X 28"D X 66"H, 120 VOLT, 20 AMP
VL53	AR	VV	INCUBATOR, BACTERIOLOGICAL, 120 VOLT, 1.5 KW
	AR	CC	RECEPTACLE, ELECTRICAL, DUPLEX, 120 VOLT, 20 AMP (H-08-1, MCS 16140; H-08-3, CS 801-3)

Procedural Laboratory (Barrier Suite)

Design Standards

ARCHITECTURAL

Floor Area	200 NSF	Wall Finish	CMU (SC)
Ceiling	PCP	Wainscot	-
Ceiling Height	9'-0"	Base	ERF
Slab Depression	-	Floor Finish	ERF
Notes:		Lead Lining	-

SPECIAL EQUIPMENT

H12-54/78 FUME HOOD

ELECTRICAL

Lighting

General	70 FC, 3.5 W/SF*
Special	-
Emergency	50% GEN FLUOR

Notes:
*COLOR CORRECTED FLUOR LAMPS

Power

General	1080 W
Special	**
Emergency	**

**H12: 600 W; REFRIGERATOR: 1200 W; EMERGENCY CIRCUIT

COMMUNICATIONS

Telephone	WALL MTD	ADP	EMPTY CONDUIT
Intercom	PART OF TELEPHONE	Radio	-
Public Address	-	Other	-

Notes:

HEATING, VENTILATING AND AIR CONDITIONING

AC Load Lights	4.0 W/SF
AC Load Equipment	5.2 W/SF
Number of People	3
Noise Criteria	NC-40
Room Pressure	NEGATIVE
Dry Bulb Temp Cooling (F)	78
Dry Bulb Temp Heating (F)	72
Minimum Air Changes per Hour	15 (SA)
Minimum % Outside Air	100
100% Exhaust Air	YES
Special Exhaust	YES*
Steam	-
Relative Humidity - Cooling	50 %
Relative Humidity - Heating	30 %

Notes:
*H12: SEE H-08-4 SD624.6, HVAC DESIGN MANUAL FOR CAPACITY

PLUMBING AND MEDICAL GASES

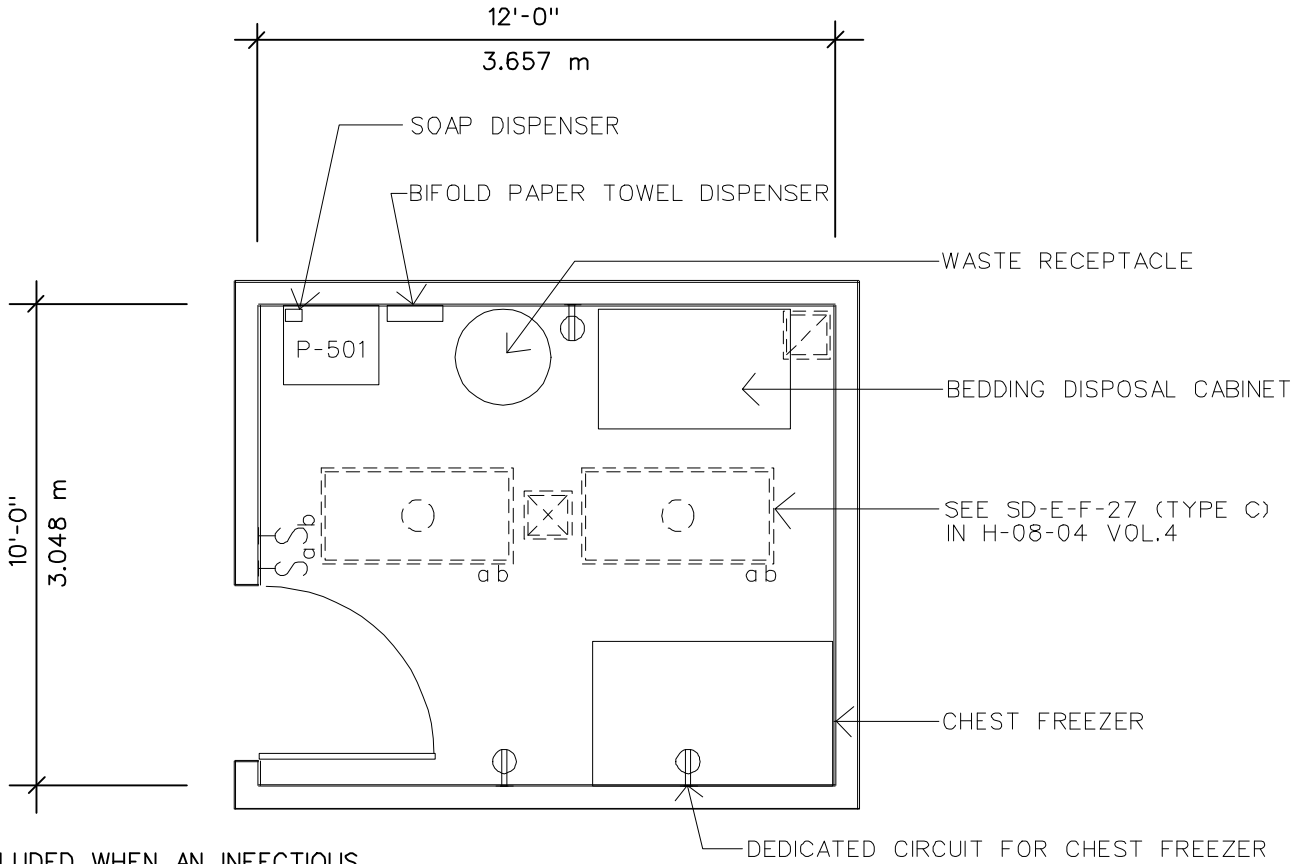
Sanitary Drain	YES	Cold Water	YES
Acid Waste	YES	Hot Water	YES
Silver Recovery	-	Reagent Water	-
Medical Air	-	Laboratory Air	YES
Medical Vacuum	-	Laboratory Vacuum	YES
Oxygen	-	Fuel Gas	YES
Nitrous Oxide	-	Anesthesia Evac	-

Notes:
H12:LAB AIR, LAB VACUUM, FUEL GAS, COLD WATER, ACID WASTE

Procedural Laboratory (Barrier Suite)

Equipment Guide List

SYMBOL	QTY	AI	DESCRIPTION
NOTE: ALL LABORATORY FURNITURE SYMBOLS PREFIXED BY "M" SHALL BE INTERCHANGABLE SUSPENSION SYSTEM TYPE.			
TOP 5	1	CF	COUNTERTOP, CORROSION RESISTING (STAINLESS) STEEL, RAISED RIM, WITH INTEGRAL SINK AND SPLASHBACKS (H-08-1 & H-08-6, MCS 11602)
R-2A	1	CF	SINK, CORROSION RESISTING (STAINLESS) STEEL, WITH END OR CORNER DRAIN OUTLET, WITH OR WITHOUT DRAINBOARD AND SENSOR CONTROL, 18" X 18" X 16" DEEP (H-08-1 & H-08-6, MCS 11602)
M20/20A	1	CF	CABINET, UNDERCOUNTER, SINK UNIT, 2 HINGED PANEL DOORS, AVAILABLE WIDTHS 30", 36", 42", 48"; DEPTH 22"; HEIGHTS 31", 25" (H-08-1 & H-08-6, MCS 12346)
M205/205A	2	CF	CABINET, UNDERCOUNTER, 6/5 DRAWERS, WITH LOCK AND KEY, AVAILABLE WIDTHS 36", 48"; DEPTH 22"; HEIGHTS 31", 25" (H-08-1 & H-08-6, MCS 12346)
			-OR-
M202/202A	2	CF	CABINET, UNDERCOUNTER, 7/6 DRAWERS, WITH LOCK AND KEY, AVAILABLE WIDTHS 36", 48"; DEPTH 22"; HEIGHTS 31", 25" (H-08-1 & H-08-6, MCS 12346)
M7/7A	2	CF	CABINET, UNDERCOUNTER, WITH 2 HINGED DOORS AND 2/1 ADJUSTABLE SHELVES, WITH LOCK AND KEY, AVAILABLE WIDTHS 36", 48"; DEPTH 22"; HEIGHTS 31", 25" (H-08-1 & H-08-6, MCS 12346)
M14	AR	CF	TABLE FRAME, WITH DRAWER(S), KNEE SPACE UNIT, AVAILABLE WIDTHS AS REQUIRED, DEPTH 22"; HEIGHT 31" (H-08-1 & H-08-6, MCS 12346)
M25	2	CF	CABINET, WALL, WITH SLOPING TOP, 2 GLAZED SLIDING DOORS AND 2 ADJUSTABLE SHELVES, WITH LOCK AND KEY, AVAILABLE WIDTHS 30", 36", 42", 48"; DEPTH 13"; HEIGHT 30" (H-08-1 & H-08-6, MCS 12346)
H12-54/78	1	CC	CABINET, AIR FLOW, BIOLOGICAL WITH AIR, GAS AND VACUUM OUTLETS, 120 VOLT, 20 AMP, RECEPTACLE (H-08-1 & H-08-6, MCS 11604)
	1	CC	OUTLETS, ONE EACH, AIR, GAS AND VACUUM GROUPED OVER COUNTER (H-08-1 & H-08-6, MCS 11602)
	AR	CC	CONNECTIONS, PLUMBING, ELECTRICAL OR MECHANICAL AS REQUIRED
	AR	CC	RECEPTACLE, ELECTRICAL, DUPLEX, 120 VOLT, 20 AMP, STRIP MOLD WITH OUTLETS ON 24" CENTERS, 9" ABOVE COUNTER (H-08-1, MCS 16140; H-08-3, CS 801-3)
	1	VV	REFRIGERATOR, DOMESTIC TYPE, 15 CU. FT., APPROX. 31"W X 28"D X 66"H, 120 VOLT, 20 AMP
	AR	CC	RECEPTACLE, ELECTRICAL, DUPLEX, 120 VOLT, 20 AMP (H-08-1, MCS 16140; H-08-3, CS 801-3)



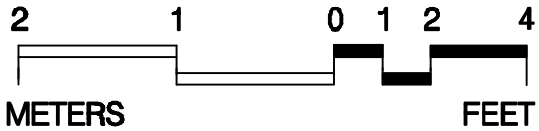
NOTE: FOR ALL P EQUIPMENT SEE H-08-04 VOL.1

NOTE: THIS ROOM TO BE INCLUDED WHEN AN INFECTIOUS DISEASE SUITE OR A CHEMICAL/RADIOISOTOPE SUITE IS INCLUDED

NOTE: THIS PLAN APPLICABLE ONLY WHEN ROOM IS APPROVED BY VHA

120 NSF
11.148 m²

Hazardous Waste Disposal Room



Equipment & Utility Plan

Hazardous Waste Disposal Room

Design Standards

ARCHITECTURAL

Floor Area	120 NSF	Wall Finish	CMU (SC)
Ceiling	PCP	Wainscot	-
Ceiling Height	9'-0"	Base	ERF
Slab Depression	-	Floor Finish	ERF
Notes:		Lead Lining	-

SPECIAL EQUIPMENT

NONE

ELECTRICAL

Lighting

General	50 FC, 2.5 W/SF
Special	-
Emergency	-
Notes:	

Power

General	540 W
Special	*
Emergency	*

*CHEST FREEZER: 1200 W

COMMUNICATIONS

Telephone	-	ADP	-
Intercom	-	Radio	-
Public Address	-	Other	-
Notes:			

HEATING, VENTILATING AND AIR CONDITIONING

AC Load Lights	2.5 W/SF
AC Load Equipment	6.6 W/SF
Number of People	1
Noise Criteria	NC-40
Room Pressure	NEGATIVE
Dry Bulb Temp Cooling (F)	78
Dry Bulb Temp Heating (F)	72
Minimum Air Changes per Hour	10 (EA)
Minimum % Outside Air	100
100% Exhaust Air	YES
Special Exhaust	-
Steam	-
Relative Humidity - Cooling	50 %
Relative Humidity - Heating	30 %
Notes:	

PLUMBING AND MEDICAL GASES

Sanitary Drain	YES	Cold Water	YES
Acid Waste	-	Hot Water	YES
Silver Recovery	-	Reagent Water	-
Medical Air	-	Laboratory Air	-
Medical Vacuum	-	Laboratory Vacuum	-
Oxygen	-	Fuel Gas	-
Nitrous Oxide	-	Anesthesia Evac	-
Notes:			

Hazardous Waste Disposal Room

Equipment Guide List

SYMBOL	QTY	AI	DESCRIPTION
P-501	AR	VV	CABINET, BEDDING DISPOSAL, PORTABLE ON CASTERS, LAMINAR FLOW HEPA FILTER, APPROX. 48" X 30"
	1	CC	SINK, SERVICE, REGULAR (H-08-1, MCS 15450; H-08-4, SD 4.1)
	1	VV	DISPENSER, SOAP, LIQUID, WALL MOUNTED
	1	VV	DISPENSER, BIFOLD PAPER TOWEL, SURFACE MOUNTED
	AR	VV	RECEPTACLE, WASTE, 24" DIAMETER
	AR	CC	RECEPTACLE, ELECTRICAL, DUPLEX, 120 VOLT, 20 AMP (H-08-1, MCS 16140; H-08-3, CS 801-3)