

PLUMBING FIXTURE SCHEDULE

- | SYM. | DESCRIPTION | COLD | HOT | TEPID | TRAP | WASTE | VENT | REMARKS |
|------|--|------|------|-------|--------|-------|------|---------------|
| P-1A | WATER CLOSET - FLOOR MOUNTED | 1" | - | - | INT | 3" | 2" | - |
| P-1B | WATER CLOSET - FLOOR MOUNTED, MANUAL FLUSH VALVE ADA | 1" | - | - | INT | 3" | 2" | ADA COMPLIANT |
| P-2A | URINAL - WALL MOUNTED, MANUAL FLUSH VALVE. | 3/4" | - | - | INT | 2" | 2" | - |
| P-2B | URINAL - WALL MOUNTED, MANUAL FLUSH VALVE, ADA | 3/4" | - | - | INT | 2" | 2" | ADA COMPLIANT |
| P-3 | LAVATORY, PUBLIC USE, UNDER MOUNT OVAL SINK. | 1/2" | 1/2" | - | 1-1/2" | 2" | 2" | ADA COMPLIANT |
| P-4 | SERVICE SINK - FLOOR MOUNTED, PROVIDE WITH STAINLESS STEEL RIM GUARD | 1/2" | 1/2" | - | 3" | 2" | 2" | - |
| P-5 | BREAKROOM SINK, SINGLE COMPARTMENT | 1/2" | 1/2" | - | 1-1/2" | 2" | 2" | - |
| P-6 | ELECTRIC WATER COOLER, HIGH-LOW, WITH BOTTLE FILLER. | 1/2" | - | - | 1-1/2" | 2" | 2" | - |
| IMC | ICE MAKER CONNECTION BOX | 1/2" | - | - | - | - | - | - |
| WH | WALL HYDRANT | 3/4" | - | - | - | - | - | - |
| FD-1 | FLOOR DRAIN | - | - | - | 2" | 2" | 2" | - |
| FCO | FLOOR CLEANOUT | - | - | - | - | - | - | - |
| WCO | WALL CLEANOUT | - | - | - | - | - | - | - |
| CO | CLEANOUT | - | - | - | - | - | - | - |

ELECTRIC WATER HEATER

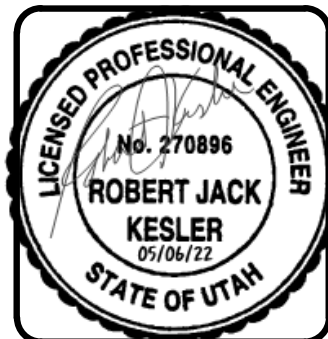
SYMBOL	ELEMENT WATTAGE KW	DOMESTIC WATER			STORAGE GALLON	ELECTRICAL			A.O. SMITH MODEL NUMBER	EFF.	DISCONNECT	REMARKS
		GPH	EWT	LW		VOLTS	HERTZ	PHASE				
EW-H-1	4.5	15	40°F	122°F	20	208	60	3	DEL-20	100%	PROVIDE DISCONNECT TO MEET (PC504.3). SEE ELECTRICAL DRAWING EO.6	STANDBY LOSSES TO MEET ENERGY EFFICIENCY REQUIREMENTS FOR WATER HEATER CONSTRUCTION OF ASHRAE 90.1-10 AND IECC C404.2

DOMESTIC EXPANSION TANK - ASME

SYMBOL	TANK VOLUME (GAL)	ACCEPT VOLUME (GAL)	AMTROL MODEL	ARRANGEMENT	DUTY	REMARKS
DET-1	2	0.45	ST-5	VERTICAL	DOMESTIC FOLD WATER SYSTEM	-

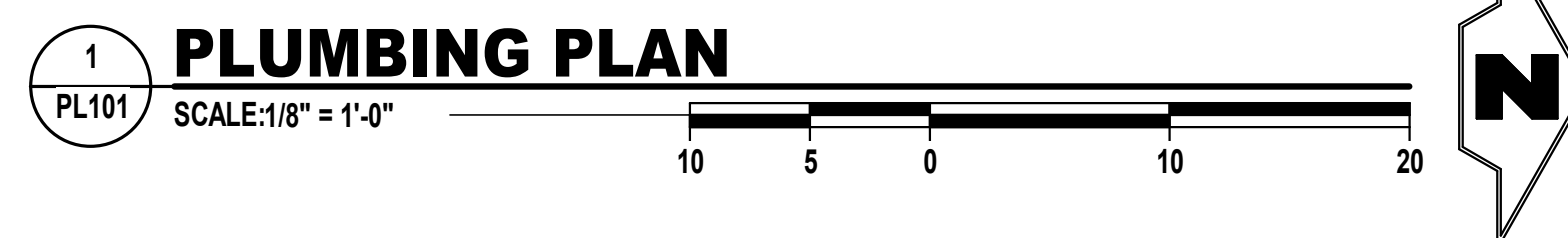
THERMOSTATIC MIXING VALVE SCHEDULE

SYMBOL	MANUFACTURER AND MODEL NO.	LOCATION	FLOW RATE (GPM)	ALLOWABLE PRESSURE DIFFERENTIAL (PSI)	OUTLET HOT WATER TEMP. (°F)	INLET SIZE	OUTLET SIZE	ACCESSORIES AND REMARKS
MV-1	POWERS - LFG480	BELOW HAND SINKS	0.5-2.0	5	105°	1/2"	1/2"	ASSE 1070

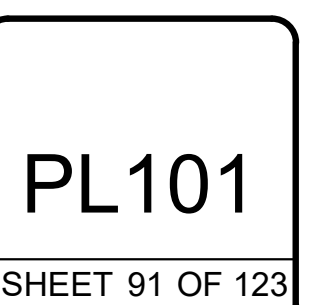


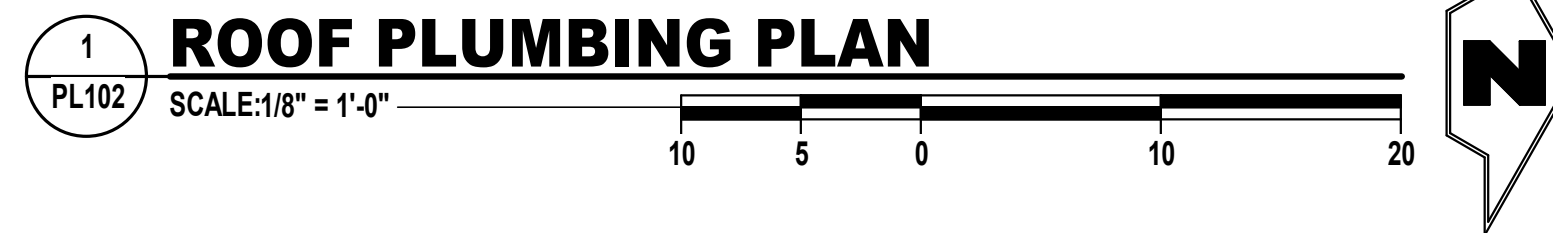
HAFB 309th SOFTWARE ENGINEERING FACILITY	PLUMBING SCHEDULES AND SYMBOL LEGEND
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SHEET 90 OF 123



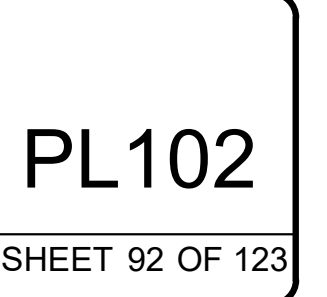
NOTE #	DESCRIPTION
1	SEE CIVIL SITE UTILITY PLAN FOR CONTINUATION.
2	SEE WATER ENTRY DETAIL 5/PL501.
3	RISE 2" VENT UP. INCREASE TO 3" AND VENT THROUGH ROOF.
4	MOUNT WATER HEATER AT 6'-0" A.F.F. SEE DETAIL 7/PL501.
5	DROP 3"RD FROM ABOVE IN WALL ON WARM SIDE OF INSULATION TO BELOW GRADE.
6	INVERT AT BUILDING WALL TO BE 98'-0" BASED ON FINISHED FLOOR OF 100'-0".
7	DROP 1-1/2" GAS TO SUPPLY BOILER. SEE DETAIL 8/PL502. INSTALL PER MANUFACTURER'S WRITTEN INSTRUCTIONS.



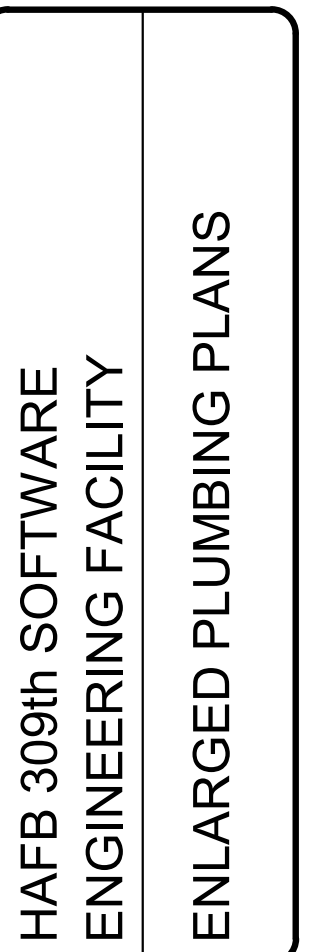
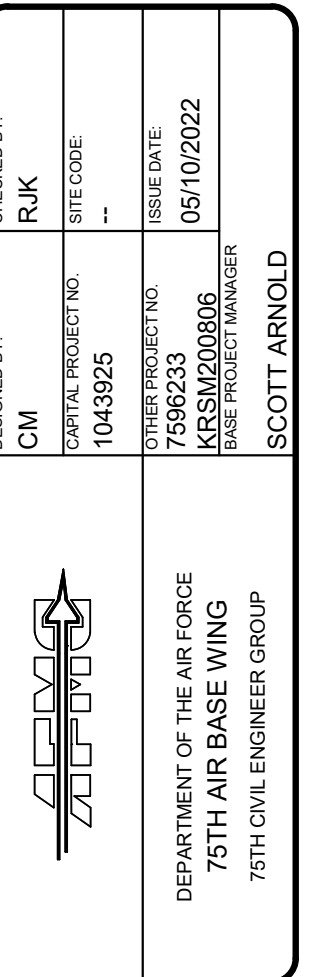
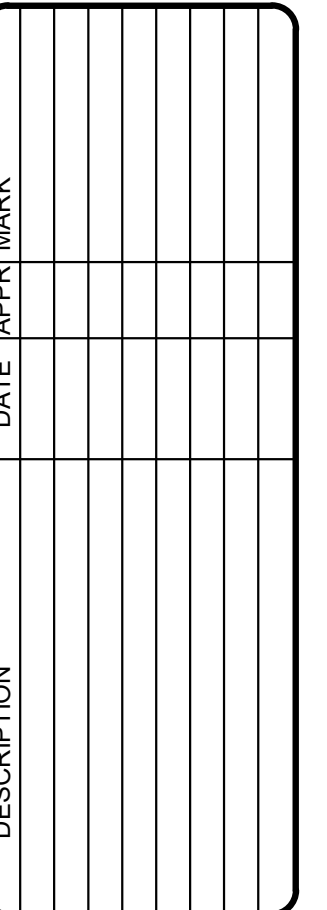


ROOF DRAIN DESIGN NOTES

DESIGN RAINFALL RATE: 1.2 IN / HR	
xx GPM	DESIGN GALLON PER MINUTE
xx SQ. FT.	DESIGN ROOF DRAIN AREA (SQ. FT.)
2% SLOPE	MINIMUM DESIGN PIPE SLOPE

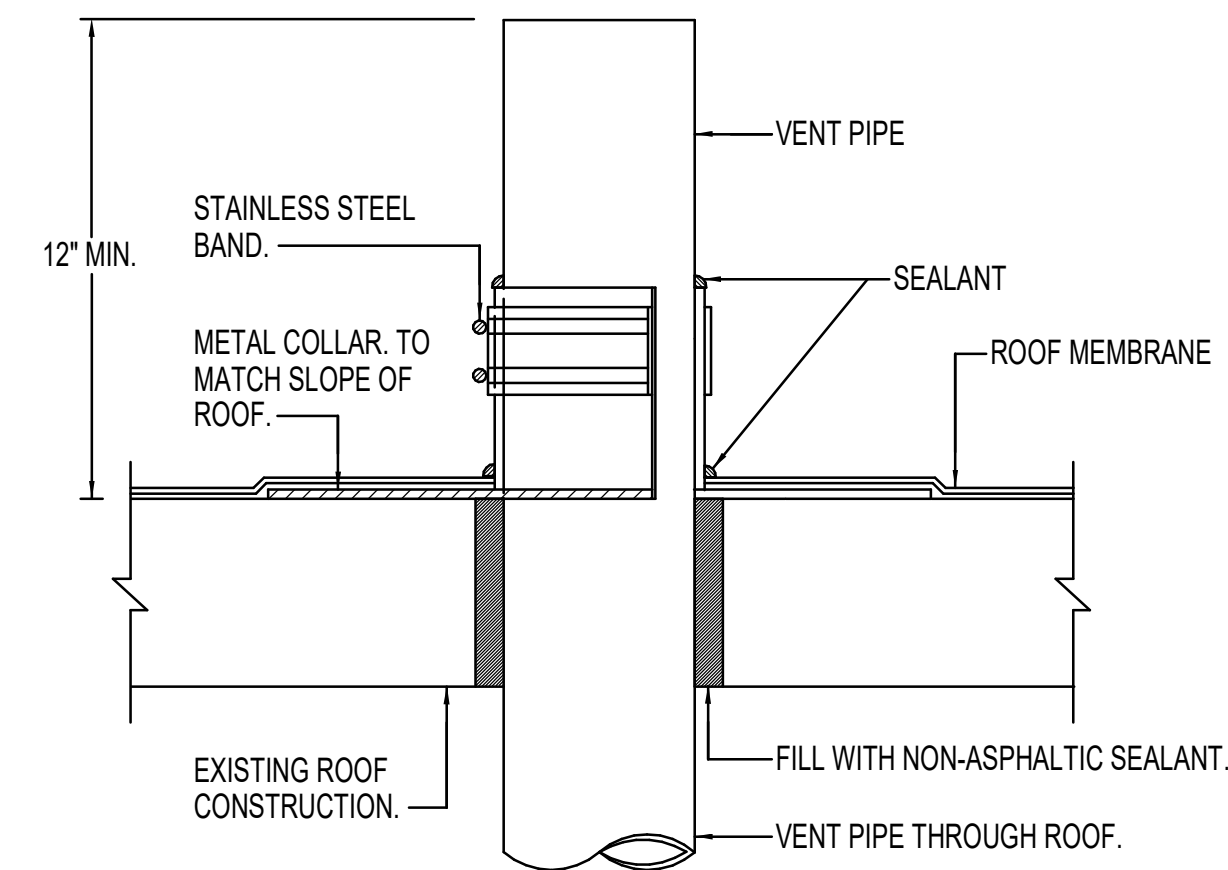


NOTE #	DESCRIPTION
1	DROP DHW LOOP TO WITHIN 2 FEET OF LAVATORY. ROUTE AS SHOWN.
2	RISE 2-1/2" VENT UP, INCREASE TO 3" AND VENT THROUGH ROOF.
3	SEE PL101 FOR CONTINUATION.



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CLAMPING COLLAR

WATERPROOF MEMBRANE

ADJUSTABLE SHANK

CERAMIC FLOOR TILE

SETTING BED

SEEPAGE CONTROL

DRAIN PIPE SHALL CONNECT TO P-TRAP

NOTE: LOCATE FLOOR DRAIN IN LOCATION SHOWN ON ARCHITECTURAL AND/OR PLUMBING PLANS. SEE ARCH. FOR LOCATION DIMENSIONS.

CLAMPING COLLAR

ADJUSTABLE SHANK

FLOOR DRAIN OR FLOOR SINK

FLOOR FINISH, SEE ARCHITECTURAL

TRAP SEAL PROTECTION DEVICE, SIOUX CHIEF 835 SERIES OR EQUAL.

WATER TRAP

SEWER GASES

DEEP SEAL P-TRAP

The diagram illustrates the required piping for a lavatory fixture. Key components and labels include:

- STRUCTURE**: The top horizontal boundary of the fixture area.
- CEILING**: The horizontal line below the structure.
- DHW LOOP**: The hot water supply line, indicated by a solid line with an arrow pointing right.
- DCW**: The cold water supply line, indicated by a solid line with an arrow pointing left.
- DHW LOOP SIZE**: The horizontal distance between the DHW and DCW supply lines.
- PIPING IN WALL**: Vertical dashed lines representing the water supply pipes within the wall.
- 1/2"**: The required pipe size for the supply lines.
- 2'-0" MAX.**: The maximum vertical distance from the ceiling to the lavatory fixture.
- LAVATORY**: The fixture itself, shown as a basin with a faucet.
- FLOOR**: The bottom horizontal boundary of the fixture area.
- ASSE 1070 THERMOSTATIC MIXING VALVE**: The valve installed below the lavatory, connected to both the hot and cold water supply lines.

PRINCIPLE REDUCED PRESSURE
PRINCIPLE BACKFLOW PREVENTER

UNION

ISOLATION BALL VALVE

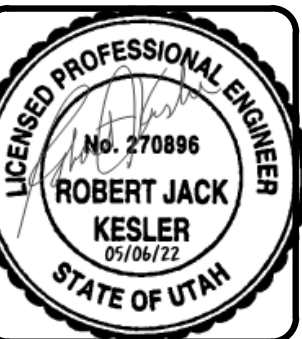
STRAINER

THIS IS REPRESENTED BY THIS SYMBOL

PIPE TO NEAREST FLOOR SINK OR DRAIN

BFP

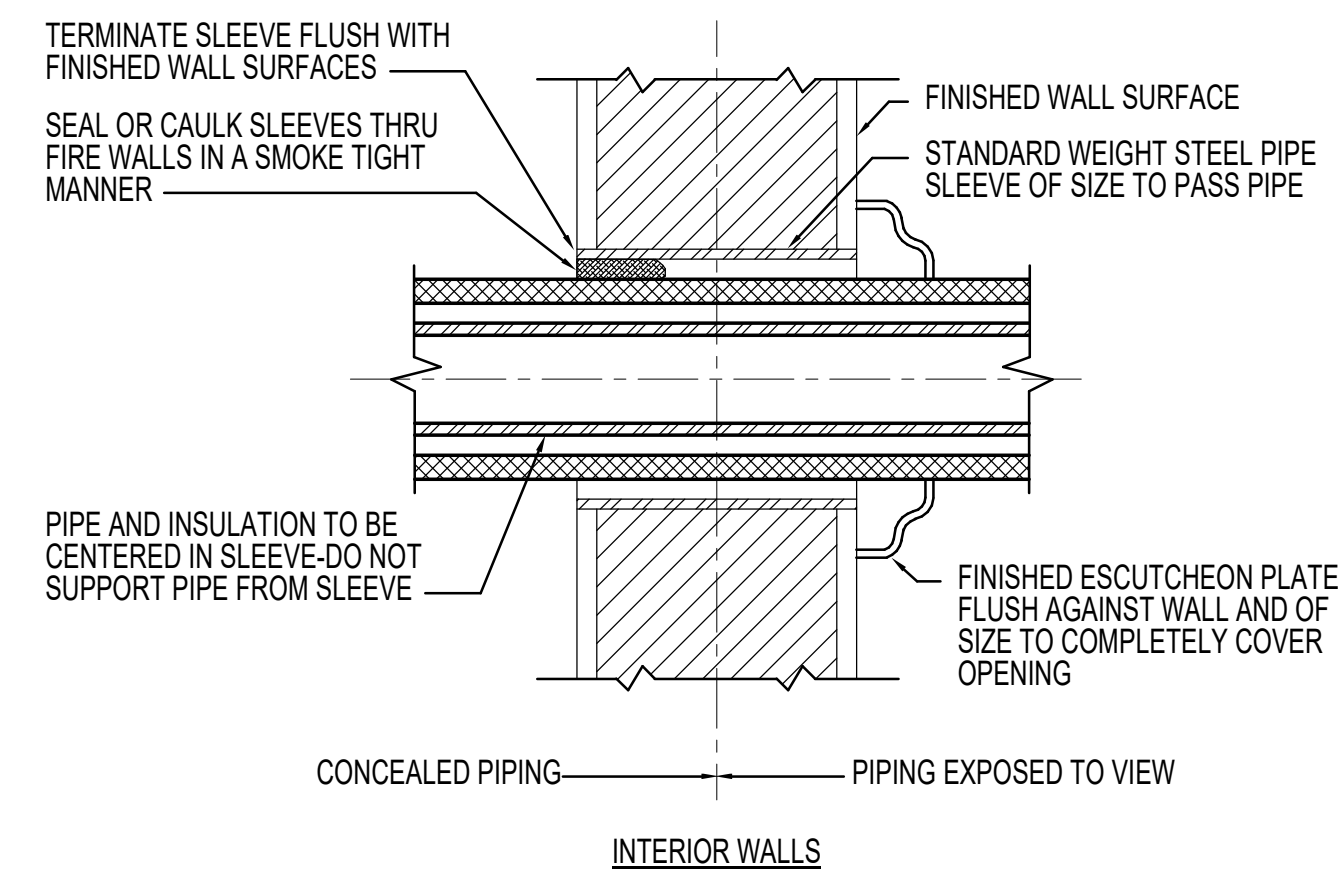
A cross-sectional diagram of a wall-mounted cleanout assembly. On the left, a vertical pipe with a dashed centerline is shown. A 'TEST TEE' is installed on this pipe, with a 'THREADED CLEANOUT PLUG' on its left side. The pipe passes through a 'FINISHED WALL SURFACE'. On the right side of the wall, a 'COVER PLATE WITH SECURING SCREW' is attached to the pipe. The diagram includes break lines to indicate the assembly continues above and below the shown section.

[illegible]

	DEPARTMENT OF THE AIR FORCE 75TH AIR BASE WING 75TH CIVIL ENGINEER GROUP		CM	CAPITAL PROJECT NO. 1043925	RJK SITE CODE **	ISSUE DATE: 05/10/2022
			7596733 KFSN20806 BASE PROJECT MANAGER			

PLUMBING DETAILS

PL501



The image contains several technical drawings of pipe hanger and support systems:

- Top Left:** A side view of a pipe hanger system. It shows a vertical rod connected to a horizontal beam/truss connection at the top. The rod passes through a turnbuckle, an eye bolt, and a pipe clamp. The pipe clamp is attached to a steel offset wall bracket, which is secured with U-bolts and cinch anchors. A welded steel wall bracket is also shown below the offset bracket.
- Top Right:** A side view of a pipe hanger system. It shows a vertical rod connected to a horizontal beam/truss connection at the top. The rod passes through a turnbuckle, an eye bolt, and a pipe clamp. The pipe clamp is attached to a steel offset wall bracket, which is secured with U-bolts and cinch anchors. A welded steel wall bracket is also shown below the offset bracket.
- Middle Left:** A side view of a pipe hanger system. It shows a vertical rod connected to a horizontal beam/truss connection at the top. The rod passes through a turnbuckle, an eye bolt, and a pipe clamp. The pipe clamp is attached to a steel offset wall bracket, which is secured with U-bolts and cinch anchors. A welded steel wall bracket is also shown below the offset bracket.
- Middle Right:** A side view of a pipe hanger system. It shows a vertical rod connected to a horizontal beam/truss connection at the top. The rod passes through a turnbuckle, an eye bolt, and a pipe clamp. The pipe clamp is attached to a steel offset wall bracket, which is secured with U-bolts and cinch anchors. A welded steel wall bracket is also shown below the offset bracket.
- Bottom Left:** A side view of a pipe hanger system. It shows a vertical rod connected to a horizontal beam/truss connection at the top. The rod passes through a turnbuckle, an eye bolt, and a pipe clamp. The pipe clamp is attached to a steel offset wall bracket, which is secured with U-bolts and cinch anchors. A welded steel wall bracket is also shown below the offset bracket.
- Bottom Right:** A side view of a pipe hanger system. It shows a vertical rod connected to a horizontal beam/truss connection at the top. The rod passes through a turnbuckle, an eye bolt, and a pipe clamp. The pipe clamp is attached to a steel offset wall bracket, which is secured with U-bolts and cinch anchors. A welded steel wall bracket is also shown below the offset bracket.

A technical diagram showing a vertical gas line with a test tee at the top, a union, and a flexible connector leading to an appliance control valve. Labels include: TEST TEE WITH 1/4" IP PLUG, FUEL GAS PIPING SEE PLAN, GAS COCK, UNION, PROVIDE LINE SIZE SEDIMENT TRAP TYPICAL, FLEXIBLE CONNECTOR, and APPLIANCE CONTROL VALVE.

2X6 BLOCKING IN WALL FOR WATER LINE SUPPORT.

WALL STUDS

15105 PIPING TO PLUMBING FIXTURE

15101 ESCUTCHEON RING

This diagram illustrates the installation of a water line through a wall. A 2x6 blocking is shown in the wall for water line support. Wall studs are also indicated. The piping (15105) is shown running through the wall and connecting to a plumbing fixture. An escutcheon ring (15101) is shown at the end of the piping.

UNISTRUT NUT WITH SPRING

UNISTRUT P-1000
MUST SPAN MINIMUM
OF 2 TRUSSES

BOTTOM CHORD OF
TRUSS OR 'TJI'

NOTE:
SEE SHEET S5.2c
FOR ADDITIONAL
DETAILS

SPRING VIBRATION ISOLATORS
INSTALL ON ALL PIPING
CONNECTING TO AND WITHIN 10
FEET OF ANY AIR HANDLER

HANGER ROD - SEE
SPECIFICATION FOR SIZE

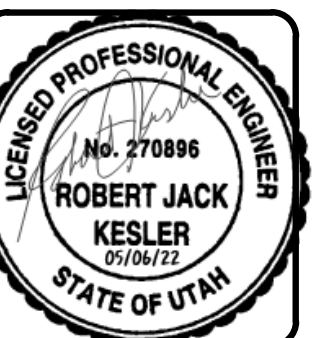
CLEVIS ASSEMBLY

HIGH DENSITY CALSIUM SILICATE
INSULATION INSERT 360 DEG.
COVERAGE/ENCASEMENT.

PIPING INSULATION

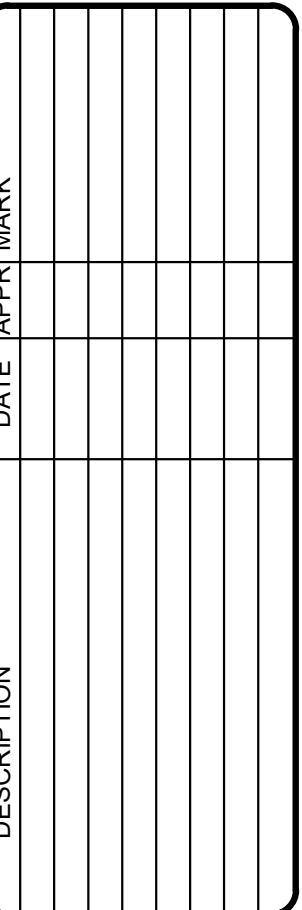
20 GUAGE PROTECTIVE SHIELD

GALVANIZED PROTECTION SHIELD.
360 DEG. COVERAGE/ENCASEMENT
16 GAGE MINIMUM (TYP.)

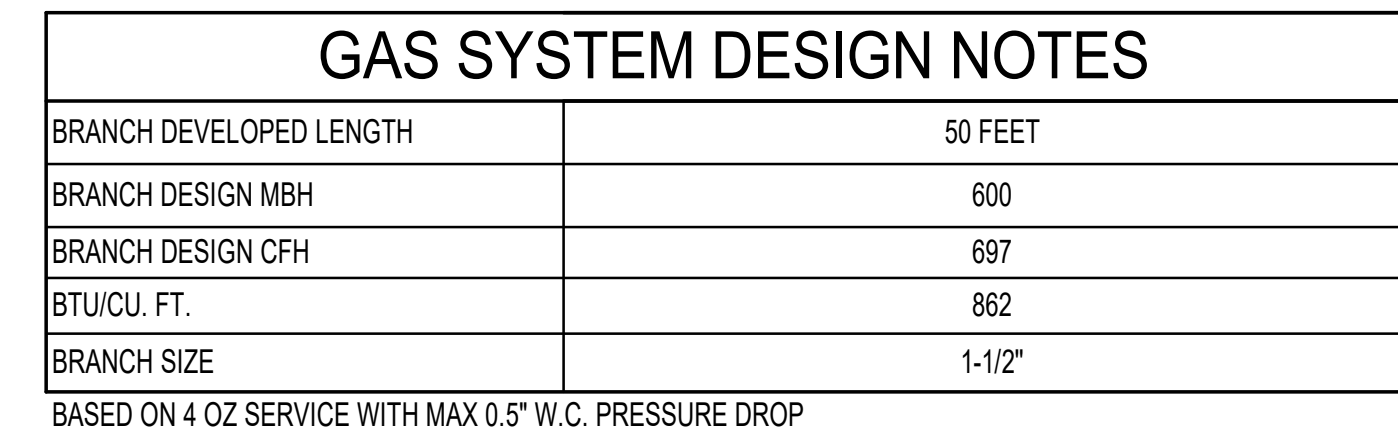
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	DEPARTMENT OF THE AIR FORCE		CM	RJK	
	75TH AIR BASE WING		DWAL PROJECT NO. 1043825	SITE CODE --	
75TH CIVIL ENGINEER GROUP	OTHER PROJECT NO. 7596233	ISSUE DATE 05/10/2022	SCOTT ARNOLD		
BASE PROJECT MANAGER					

HAFB 309th SOFTWARE ENGINEERING FACILITY
PLUMBING DETAILS



LICENSED PROFESSIONAL ENGINEER
 No. 270896
ROBERT JACK KESLER
 05/06/22
 STATE OF UTAH



	DEPARTMENT OF THE AIR FORCE 75TH AIR BASE WING 75TH CIVIL ENGINEER GROUP	
	CM	CAPITAL PROJECT NO. 1043925
RUK	SITE CODE --	ISSUE DATE: 05/10/2022
OTHER PROJECT NO. 7596233	KRSN/200906	BASE PROJECT MANAGER
SCOTT ARNOLD		

FLOW DIAGRAMS

PL601

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