

**23 05 23 01 VALVE SERVICE INDEX** **YALE UNIVERSITY** **DATE: 15-Jun-16**

GENERAL (1)				SYSTEM DESIGN (3)		COMPLIANCE		PIPING (6, 7)		VALVES (REFERENCE SECTION)					
CATEGORY	LABEL INFO	SERVICE INFORMATION	LABEL COLOR (2)	PRESS. (PSIG)	TEMP. (DegF)	CODE (4)	FLUID (5)	SIZE RANGE	PIPING MATERIAL	ISOLATION				THROTTLE	FLOW DIRECTION
										BALL - BA-XX	B'FLY - BF-XX	GATE - GA-XX	PLUG - PL-XX	GLOBE - GL-XX	CHECK - CK-XX
DRAIN	COND	COIL CONDENSATE	B ON Y	125	AMB	PLUM CODE	NA	4" & LESS	CT01						
DRAIN	LAB WASTE	LAB WASTE	B ON Y	125	AMB	PLUM CODE	NA	1-1/2" - 6"							
DRAIN	PUMPED DISCHARGE	PUMPED SANITARY WASTE, ABOVE GR ONLY	B ON Y	125	AMB	PLUM CODE	NA	1-1/2" - 6"	CS04						
DRAIN	SANITARY SEWER	SANITARY WASTE SYSTEM, BELOW GRADE	B ON Y	75 ft	180	PLUM CODE	NA	1-1/2" - 6"	CI01						CK-6
		SANITARY WASTE SYSTEM, ABOVE GR ONLY			180	PLUM CODE	NA	1-1/2" - 6"	CI01						CK-6
DRAIN	RAINWATER	STORM DRAIN	B ON Y	75 ft	100	PLUM CODE	NA	1-1/2" - 10"	CI01						
		STORM DRAIN (BELOW GRADE)		30 ft	100	PLUM CODE	NA	1-1/2" - 12"	CI01						
		STORM DRAIN - OUTSIDE BUILDING				PLUM CODE	A	ALL							
DRAIN	RAINWATER PUMPED	STORM DRAIN, PUMPED	W ON G	125	AMB	PLUM CODE	NA	1-1/2" - 6"							
GAS	COMPRESSED AIR	COMPRESSED AIR (CLEAN DRY AIR)	W ON B	150	100	B31.3	D	4" & LESS	CT01	BA-1					
GAS	NG	NATURAL GAS - ABOVE GRADE	B ON Y	200	100	NFPA 54 /B31.3	N	1" - 4"	CS01	BA-1			PL-1		
OTHER	FOR/S	FUEL OIL RETURN/SUPPLY	B ON Y	300	100	B31.3	N	1/2" - 4"	CS01	BA-1			PL-2		CK-3
OTHER	VACUUM	VACUUM PROCESS SYSTEM	W ON B	30 in. Hg	100	B31.3	D	4" & LESS	CT01	BA-1					
WATER	CHWR/S	CHILLED WATER RETURN/SUPPLY	W ON G	150	100	B31.3	D	4" & LESS	CS01	BA-1					CK-1(9)
								2-1/2" - 24"	CS01		BF-1	GA-3 (8)			CK-2 (9)
								4" & LESS	CT01	BA-1					CK-1(9)
WATER	CW	CITY SERVICE POTABLE WATER	W ON G	125	34-100	PLUMB CODE	NA	2-1/2" & LESS	DI01	BA-4					
								3" & UP	DI01						
WATER	LPR	LOW PRESSURE CONDENSATE RETURN	W ON G	20	259	B31.3	D	2" & LESS	CS03	BA-2					CK-5
								2-1/2" & UP	CS03		BF-2	GA-3 (8)			CK-5

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CATEGORY	LABEL INFO	SERVICE INFORMATION	LABEL COLOR (2)	PRESS. (PSIG)	TEMP. (DegF)	CODE (4)	FLUID (5)	SIZE RANGE	PIPING MATERIAL	ISOLATION				THROTTLE	FLOW DIRECTION
										BALL - BA-XX	B'FLY - BF-XX	GATE - GA-XX	PLUG - PL-XX	GLOBE - GL-XX	CHECK - CK-XX
WATER	MPR	MED. PRESSURE CONDENSATE RETURN	W ON G	80	324	B31.3	D	2" & LESS	CS03	BA-2					CK-5
								2-1/2" & UP	CS03		BF-2	GA-4 (8)		CK-5	
WATER	HPR	HIGH PRESSURE CONDENSATE RETURN	W ON G	300	410	B31.3	D	2" & LESS	CS03	BA-2					CK-5
								2-1/2" & UP	CS03		BF-2	GA-5 (8)		CK-5	
WATER	HPC, MPC, LPC	PUMPED CONDENSATE	W ON G	75	212	B31.3	D	2" & LESS	CS03	BA-2					CK-5
								2-1/2" & UP	CS03		BF-2	GA-4 (8)		CK-5	
WATER	COND R/S	CONDENSER WATER RETURN/SUPPLY	W ON G	150	100	B31.3	D	4" & LESS	CS01	BA-1					CK-1(9)
								2-1/2" & UP	CS01		BF-1	GA-3 (8)		CK-2 (9)	
WATER	COLD WATER	COLD WATER SUPPLY	W ON G	125	40 - 200	LOC. CODE	NA	4" & LESS	CT01	BA-3					CK-1(9)
				125											
WATER	GS, GR	GLYCOL SUPPLY GLYCOL RETURN	W ON G	150	250	B31.3	D	4" & LESS	CS01	BA-1		GA-3 (8)			CK-1(9)
								3" - 12"	CS01		BF-1	GA-3 (8)		CK-2 (9)	
								4" & LESS	CT01	BA-1				CK-1(9)	
WATER	HWS/R	HEATING HOT WATER SUPPLY/RETURN	W ON G	150	250	B31.3	D	4" & LESS	CS01	BA-1					CK-1(9)
								3" - 12"	CS01		BF-1	GA-3 (8)		CK-2 (9)	
								4" & LESS	CT01	BA-1				CK-1(9)	
WATER	FPCWS/R	FACILITY PROCESS COOLING WATER SUPPLY/RETURN	W ON G	150	100	B31.3	D	2-1/2" & LESS	CT01	BA-1					CK-1(9)
								3" & UP"	CS01		BF-1			CK-2 (9)	
WATER	LPCWS/R	LAB PROCESS COOLING WATER SUPPLY/RETURN	W ON G	150	100	B31.3	D	2-1/2" & LESS							
								3" & UP"							
WATER	POTABLE COLD / HOT WATER	POTABLE WATER	W ON G	125	180	PLUM CODE	NA	4" & LESS	CT01	BA-3					CK-4
WATER	NON-POTABLE COLD / HOT WATER	NON-POTABLE WATER	W ON G	150	180	PLUM CODE	NA	4" & LESS	CT01	BA-3					
WATER	RODI WATER	RO / DI WATER				PLUM CODE									
WATER	GRAY WATER	GRAY WATER				PLUM CODE									

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										BALL - BA-XX	B'FLY - BF-XX	GATE - GA-XX	PLUG - PL-XX	GLOBE - GL-XX	CHECK - CK-XX
WATER	TEMPERED WATER	TEMPERED WATER		150	100	PLUM CODE		4" & LESS	CT01	BA-3					
WATER	WW	WELL WATER	W ON G	150	100	B31.3	D	4" & LESS		BA-3					
STEAM	LPS	LOW PRESSURE STEAM	W ON G	20	259	B31.3	D	2" & LESS	CS02	BA-2				GL-1	
								2-1/2" & UP	CS02		BF-2	GA-3 (8)			
STEAM	MPS	MEDIUM PRESSURE STEAM	W ON G	80	324	B31.3	D	2" & LESS	CS02	BA-2				GL-1	
								2-1/2" & UP	CS02		BF-2	GA-4 (8)			
STEAM	HPS	HIGH PRESSURE STEAM	W ON G	300	410	B31.3	D	2" & LESS	CS02	BA-2				GL-1	
								2-1/2" & UP	CS02		BF-2	GA-5 (8)			
VENT	VENT	VENT, LOW PRESSURE STEAM		20	259	B31.3	NA	2-1/2" & LESS	CS02						
								3" & UP	CS02						

NOTES

(1) SYSTEMS SHOWN REPRESENT TYPICAL SYSTEM SIZES AND MATERIALS, FOR ANY SYSTEMS NOT SHOWN OR FOR DEVIATION FROM DATA ABOVE, CONTACT FACILITY ENGINEERING FOR GUIDANCE AND APPROVAL.

(2) LABEL COLOR LEGEND:

- W ON B = WHITE TEXT ON BLUE BACKGROUND
- W ON G = WHITE TEXT ON GREEN BACKGROUND
- W ON R = WHITE TEXT ON RED BACKGROUND
- B ON Y = BLACK TEXT ON YELLOW BACKGROUND
- COMPLY WITH SECTION 01080, IDENTIFICATION SYSTEMS FOR LABEL INFORMATION AND PAINTING REQUIREMENTS

(3) THESE CONDITIONS ARE CONCURRENT AND CAN NOT BE TAKEN AS INDIVIDUAL MAXIMUMS

(4) CODE IS ANSI / ASME UNLESS OTHERWISE INDICATED  
 PLUMBING CODE IS: OFFICIAL COMPILATION OF CODES, RULES & REGULATIONS OF THE STATE OF CONNECTICUT

(5) FLUID CATEGORY AS PER ASME B31.3  
 N = NORMAL FLUID SERVICE  
 D = CATEGORY D FLUID SERVICE  
 M = CATEGORY M FLUID SERVICE  
 H = HIGH PRESSURE FLUID SERVICE  
 NA = NOT APPLICABLE

(6) SECONDARY CONTAINMENT PIPING SYSTEMS WILL HAVE TWO (2) SECTIONS AND PIPING MATERIAL REFERENCES. THE NAMING CONVENTION IS AS FOLLOWS: INNER PIPE, OUTER PIPE

(7) FOR SYSTEMS THAT SHOW MULTIPLE MATERIAL OPTIONS FOR THE SAME PIPE SIZES, FACILITY ENGINEERING SHALL BE CONTACTED FOR MATERIAL SELECTION

(8) GATE VALVES ARE GENERALLY FOR REPLACING EXISTING TYPE VALVES IN KIND. NEW DESIGNS SHALL INCORPORATE BUTTERFLY AND OR BALL TYPE VALVES.

(9) CHECK VALVE FOR DISCHARGE OF PUMP