

## 1.0 PIPE LABELING AND PAINTING SPECIFICATIONS

**A. General:** RIT requires the Contractors to provide pipe labeling tagging for all projects. Please reference Table 1 for required services. For life safety services, please reference Table 2. Please work with the RIT Project Manager to ensure compliance.

### B. Table 1-Pipe Labels:

PIPE LABEL STANDARD			
SYMBOL	SERVICE TYPE	PIPE LABEL	BACKGROUND AND LETTERING COLORS
CHWR	Chilled Water Return	CHWR	DARK BLUE BACKGROUND, WHITE LETTERING
CHWS	Chilled Water Supply	CHWS	DARK BLUE BACKGROUND, WHITE LETTERING
CWR	Condenser Water Return	CWR	GREEN BACKGROUND, WHITE LETTERING
CWS	Condenser Water Supply	CWS	GREEN BACKGROUND, WHITE LETTERING
CWGLR	Chilled Water Glycol Return	CWGLR	GOLD BACKGROUND, BLACK LETTERING
CWGLS	Chilled Water Glycol Supply	CWGLS	GOLD BACKGROUND, BLACK LETTERING
HWGLR	Hot Water Glycol Return	HWGLR	GOLD BACKGROUND, BLACK LETTERING
HWGLS	Hot Water Glycol Supply	HWGLS	GOLD BACKGROUND, BLACK LETTERING
CTYW	City Water	CITY WATER	LIGHT BLUE BACKGROUND, WHITE LETTERING
DCWR	Domestic Cold Water Return	DCWR	LIGHT BLUE BACKGROUND, WHITE LETTERING
DCWS	Domestic Cold Water Supply	DCWS	LIGHT BLUE BACKGROUND, WHITE LETTERING
DHWR	Domestic Hot Water Return	DHWR	LIGHT BLUE BACKGROUND, WHITE LETTERING
DHWS	Domestic Hot Water Supply	DHWS	LIGHT BLUE BACKGROUND, WHITE LETTERING
DIW	Deionized Water	DIW	BLUE BACKGROUND, WHITE LETTERING
DTS	Dual Temp Return	DTR	BLACK BACKGROUND, WHITE LETTERING
DTR	Dual Temp Supply	DTS	BLACK BACKGROUND, WHITE LETTERING
HPR	Heat Pump Return	HPR	TEAL BACKGROUND, WHITE LETTERING
HPS	Heat Pump Supply	HPS	TEAL BACKGROUND, WHITE LETTERING
LTHWR	Low-Temp Hot Water Return	LTHWR	ORANGE BACKGROUND, BLACK LETTERING
LTHWS	Low-Temp Hot Water Supply	LTHWS	ORANGE BACKGROUND, BLACK LETTERING
MTHWR	Medium-Temp Hot Water Return	MTHWR	RED BACKGROUND, BLACK LETTERING
MTHWS	Medium-Temp Hot Water Supply	MTHWS	RED BACKGROUND, BLACK LETTERING
PRCWR	Process Chilled Water Return	PRCWR	GREY BACKGROUND, WHITE LETTERING
PRCWS	Process Chilled Water Supply	PRCWS	GREY BACKGROUND, WHITE LETTERING
PRHWR	Process Hot Water Return	PRHWR	GREY BACKGROUND, BLACK LETTERING
PRHWS	Process Hot Water Supply	PRHWS	GREY BACKGROUND, BLACK LETTERING
STM	Steam	STEAM	PINK BACKGROUND, WHITE LETTERING
COND	Condensate	COND	PINK BACKGROUND, WHITE LETTERING
CA	Compressed Air	COMP AIR	PURPLE BACKGROUND, WHITE LETTERING
VAC	Vacuum	VACUUM	PURPLE BACKGROUND, WHITE LETTERING RED BACKGROUND, WHITE LETTERING

**B. Table 2-Pipe Painting and Labels:**

PIPE PAINTING STANDARD			
SYMBOL	SERVICE TYPE	PIPE LABEL	PAINTED PIPE WITH LETTERING COLORS
FP	Fire Protection-Sprinkler Water	FIRE-SPRINKLER	RED PAINTED PIPE , WHITE LETTERING
FDC	Fire Department Connection	FIRE-FDC	RED PAINTED PIPE, WHITE LETTERING
FMD	Fire Main Drain	FIRE-FMD	RED PAINTED PIPE, WHITE LETTERING
FPT	Fire Pump Test	FIRE-FPT	RED PAINTED PIPE, WHITE LETTERING
NG	Natural Gas	GAS	YELLOW PAINTED PIPE, BLACK LETTERING

**C. Specifications-Labels:**

(A13.1-1981) ANSI requires that pipes be marked with a legend indicating the name of the contents and arrows showing the direction of flow of the material. A color is used in combination with the legend to identify the characteristic hazards of the contents. The label needs to be applied close to valves, flanges, branches, changes in direction and wherever pipes pass through walls.

<u>Outside Pipe Diameter</u>	<u>Letter Height</u>
.75" to 1.25"	.5"
1.5" to 2"	.75"
2.5" to 6"	1.25"
8" to 10"	2.5"
Over 10"	3.5"

**D. Specifications-Paint:**

Sherman Williams or approved equal:

Topcoat: B54YZ0437 - Industrial Enamel HS Safety Yellow

Topcoat: B54RZ0038 - Industrial Enamel VOC Complying Safety Red

**D. Material Vendors (or similar):**

MARKING SERVICES, INC  
Milwaukee WI 53225  
www.markserv.com

**MS-900 Self-Adhesive Pipe Markers**

## **2.0 VALVE TAGGING SPECIFICATIONS**

**A. General:** RIT valve tagging is limited to **the main heating and cooling plant loops only**. It is critical to coordinate with RIT to get the correct valve tag numbers.

### **B. Table-Valve Tag Schedule:**

<b>VALVE TAG STANDARD</b>			
<b>RIT - ENGINEERING SERVICES</b>			
<b><u>SYMBOL</u></b>	<b><u>SERVICE TYPE</u></b>	<b><u>VALVE TAG</u></b>	<b><u>BACKGROUND AND LETTERING COLORS</u></b>
CHWR	Chilled Water Return	(BLDG.)-CHV-##	<b>DARK BLUE BACKGROUND, WHITE LETTERING</b>
CHWS	Chilled Water Supply	(BLDG.)-CHV-##	<b>DARK BLUE BACKGROUND, WHITE LETTERING</b>
MTHWR	Medium-Temp Hot Water Return	(BLDG.)-MTV-##	<b>RED BACKGROUND, BLACK LETTERING</b>
MTHWS	Medium-Temp Hot Water Supply	(BLDG.)-MTV-##	<b>RED BACKGROUND, BLACK LETTERING</b>

### **C. Specifications:**

- Size: 2" x 2" square with hole drilled in center at top.
- Font: HEL Medium 4L
- Word Size: .30"
- Contractor to provide an Excel spreadsheet of valve tags and system to RIT.

### **D. Material Vendors (or similar):**

MARKING SERVICES, INC  
Milwaukee WI 53225  
www.markserv.com

**Engraved Plastic Valve Tags**