



*Quality People. Building Solutions.*

Comfort Systems USA (Arkansas), Inc.  
P.O. Box 16620  
Little Rock, AR 72231  
Phone 501-834-3320  
Fax 501-834-5416

**Date:** 3/15/2024

**Return Request:** 3/25/2024

**Project:** Anduril Industries – Bldgs. 301, 400, 600

**Supplier:** Comfort Systems USA (Arkansas), Inc.

**Manufacturer:** Kolbi

**Submittal:** HVAC ID

**Submittal Number:** 23 05 53-01

**Drawing # and Installation:** Mechanical Drawings

**ARCHITECT**

William Thomas Moore, AIA  
1300 E. 6<sup>th</sup> Street  
Little Rock, AR 72202  
501-372-2900

**ENGINEER**

Cromwell  
1300 E. 6<sup>th</sup> Street  
Little Rock, AR 72202  
501-372-2900

**GENERAL CONTRACTOR**

**MECHANICAL SUBCONTRACTOR**

Comfort Systems USA (Arkansas), Inc.  
9924 Landers Rd.  
N. Little Rock, AR 72117  
501-834-3320

Notes:

[tad@comfortar.com](mailto:tad@comfortar.com)

9924 Landers Rd.  
No. Little Rock, AR 72117



**Division 22/23**

**Ivey Submission #16 Revised**

**Buildings 301,400, and 600**

**Specification Section 22 05 53 & 23 05 53 – Identification for Plumbing Piping and Equipment & Identification for HVAC Piping and Equipment**

- Domestic Water Hot and Cold – white text/green background
  - Compressed Air – white text/blue background
  - Vacuum – white text/purple background
- 
- Valve Tags
  - Nameplates

**Submitted Date: 3/14/2024**

**Owner:**

**Anduril Industries**

**488 East McHenry Rd.**

**McHenry, MS 39561**

**Mechanical Engineer:**

**Cromwell Architects Engineers, Inc.**

**1300 East 6<sup>th</sup> Street**

**Little Rock, AR 72202**

Ivey Mechanical Company  
514 North Wells Street  
P.O. Box 610  
Kosciusko, MS  
662.289.3646  
Fax: 662.289.3713



LEGEND #	LEGEND	LEGEND #	LEGEND	LEGEND #	LEGEND	LEGEND #	LEGEND
L355	110° HOT WATER RETURN	L158	DISTILLED WATER	L531	HEATING WATER SUPPLY	L279	PROPANE GAS
L500	110° HOT WATER RETURN	L161	DOMESTIC COLD WATER	L532	HEATING WATER SUPPLY	L280	PUMPED CONDENSATE
L361	110° HOT WATER SUPPLY	L159	DOMESTIC COLD WATER RETURN	L533	HIGH PRESSURE CONDENSATE	L550	PUMPED CONDENSATE
L501	110° HOT WATER SUPPLY	L160	DOMESTIC COLD WATER SUPPLY	L534	HIGH PRESSURE CONDENSATE	L282	RAIN WATER
L357	140° HOT WATER RETURN	L166	DOMESTIC HOT WATER	L535	HIGH PRESSURE GAS	L283	REFRIGERANT
L502	140° HOT WATER RETURN	L511	DOMESTIC HOT WATER	L536	HIGH PRESSURE STEAM	L287	REFRIGERANT LIQUID
L364	140° HOT WATER SUPPLY	L175	DOMESTIC HOT WATER RECIRC	L537	HIGH PRESSURE STEAM	L288	REFRIGERANT SUCTION
L35	140° HOT WATER SUPPLY	L512	DOMESTIC HOT WATER RECIRC	L538	HOT WATER	L290	RETURN
L559	ABANDONED	L174	DOMESTIC HOT WATER RETURN	L539	HOT WATER	L35	RETURN
L100	ACID	L513	DOMESTIC HOT WATER RETURN	L223	HOT WATER RETURN	L293	ROOF DRAIN
L503	ACID	L172	DOMESTIC HOT WATER SUPPLY	L540	HOT WATER RETURN	L291	SANITARY DRAIN
L102	ACID VENT	L514	DOMESTIC HOT WATER SUPPLY	L224	HOT WATER SUPPLY	L292	SANITARY SEWER
L504	ACID VENT	L165	DOMESTIC WATER	L541	HOT WATER SUPPLY	L294	SANITARY VENT
L105	ACID WASTE	L515	DOMESTIC WATER	L225	HYDROGEN	L295	SANITARY WASTE
L505	ACID WASTE	L167	DRAIN	L542	HYDROGEN	L297	SNOWMELT RETURN
L111	AIR	L516	DRAIN	L128	INDUSTRIAL COLD WATER	L298	SNOWMELT SUPPLY
L115	AMMONIA	L152	DUAL TEMP RETURN	L127	INDUSTRIAL HOT WATER	L300	SOFT WATER
L506	AMMONIA	L517	DUAL TEMP RETURN	L543	INDUSTRIAL HOT WATER	L303	SOLAR RETURN
L118	ARGON	L157	DUAL TEMP SUPPLY	L125	INDUSTRIAL WATER	L304	SOLAR SUPPLY
L119	ASBESTOS FREE	L518	DUAL TEMP SUPPLY	L231	INSTRUMENT AIR	L307	SPRINKLER
L120	BOILER BLOW DOWN	L176	FILTERED WATER	L232	LAB AIR	L309	SPRINKLER WATER
L121	BOILER FEED WATER	L519	FIRE DAMPER	L234	LAB VACUUM	L316	STEAM
L122	CARBON DIOXIDE	L520	FIRE PROTECTION	L230	LAB VENT	L551	STEAM
L507	CARBON DIOXIDE	L180	FIRE PROTECTION WATER	L544	LAB VENT	L317	STEAM CONDENSATE
L124	CARBON DIOXIDE	L181	FIRE SPRINKLER WATER	L293	LAB WASTE	L552	STEAM CONDENSATE
L131	CHILLED WATER	L188	FUEL OIL	L545	LAB WASTE	L310	STEAM RETURN
L35	CHILLED WATER RETURN	L185	FUEL OIL RETURN	L238	LOW PRESSURE CONDENSATE	L319	STEAM SUPPLY
L129	CHILLED WATER SUPPLY	L186	FUEL OIL SUPPLY	L546	LOW PRESSURE CONDENSATE	L553	STEAM SUPPLY
L133	CHLORINE	L189	GAS	L240	LOW PRESSURE STEAM	L313	STORM DRAIN
L508	CHLORINE	L521	GEO THERMAL WATER RETURN	L547	LOW PRESSURE STEAM	L314	STORM SEWER
L134	CITY WATER	L522	GEO THERMAL WATER SUPPLY	L246	MAKE-UP WATER	L315	STORM WATER
L137	COLD WATER	L191	GLYCOL	L247	MEDICAL AIR	L320	SUMP PUMP DISCHARGE
L135	COLD WATER RETURN	L523	GLYCOL	L249	MEDIUM PRESSURE CONDENSATE	L321	SUPPLY
L136	COLD WATER SUPPLY	L190	GLYCOL RETURN	L250	MEDIUM PRESSURE STEAM	L554	SUPPLY
L138	COMPRESSED AIR	L524	GLYCOL RETURN	L548	MEDIUM PRESSURE STEAM	L328	TEMPERED WATER
L139	COMPRESSED AIR	L195	GLYCOL SUPPLY	L255	NATURAL GAS	L555	TEMPERED WATER
L142	CONDENSATE	L525	GLYCOL SUPPLY	L256	NATURAL GAS 2 PSI	L326	TOWER WATER
L509	CONDENSATE	L201	HEAT PUMP RETURN	L258	NITROGEN	L324	TOWER WATER RETURN
L143	CONDENSATE DRAIN	L202	HEAT PUMP SUPPLY	L259	NITROGEN	L325	TOWER WATER SUPPLY
L35	CONDENSATE DRAIN	L208	HEATING HOT WATER RETURN	L260	NITROUS OXIDE	L329	VACUUM
L103	CONDENSATE RETURN	L526	HEATING HOT WATER RETURN	L262	NON-POTABLE WATER	L556	VACUUM
L510	CONDENSATE RETURN	L210	HEATING HOT WATER SUPPLY	L549	NON-POTABLE WATER	L331	VENT
L145	CONDENSER WATER RETURN	L527	HEATING HOT WATER SUPPLY	L560	NON-POTABLE WATER	L557	VENT
L146	CONDENSER WATER SUPPLY	L204	HEATING RETURN	L266	OXYGEN	L332	WASTE
L147	CONDENSER WATER	L528	HEATING RETURN	L267	PLANT AIR	L558	WASTE
L150	COOLING WATER	L207	HEATING SUPPLY	L268	POTABLE COLD WATER	L334	WASTE
L148	COOLING WATER RETURN	L529	HEATING SUPPLY	L269	POTABLE HOT WATER	L336	WASTE WATER
L149	COOLING WATER SUPPLY	L211	HEATING WATER RETURN	L273	POTABLE WATER	L339	WATER
L153	DEIONIZED WATER	L530	HEATING WATER RETURN	L276	PROCESS WATER	L340	WELL WATER

**Location of Identification Markers**



Adjacent To Valves & Flanges



Adjacent To Directional Changes



Every 25 - 50ft On Straight Pipes



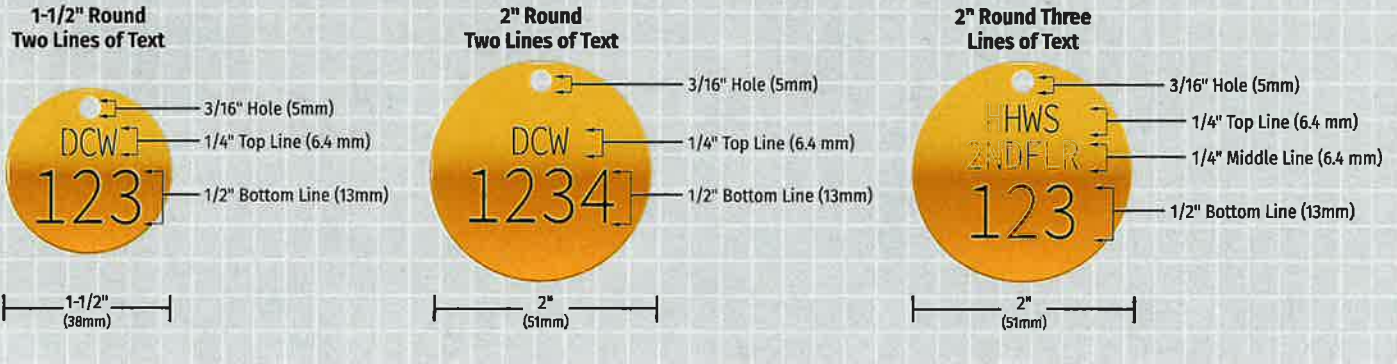
At Each Side Of Floor Or Wall Pass-Through

**Color Designations**

Fluid Service	Letters & Colors
Fire Quenching Fluids	<b>LETTERS</b>
Toxic And Corrosive Fluids	<b>LETTERS</b>
Flammable Liquids	<b>LETTERS</b>
Combustible Fluids	<b>LETTERS</b>
Potable, Cooling, Boiler Feed, Other Water	<b>LETTERS</b>
Compressed Air	<b>LETTERS</b>
Vacuum Defined By User	<b>LETTERS</b>
Defined By User	<b>LETTERS</b>
Defined By User	<b>LETTERS</b>
Defined By User	<b>LETTERS</b>

Kolbi stamped brass valve tags are the most requested valve tags in construction specifications. Made of highly durable .036" (19 gauge) brass, deep stamped and blacked filled for easy readability. Standard sizes are 1-1/2" and 2" and available with standard system abbreviations or custom to meet specific project requirements.

**Brass Valve Tag Examples**



Tag Sizes	Top Line	Middle Line	Bottom Line
○ 1-1/2" Round ●	○ 1/4" (5 Characters)	○ N/A	○ 1/2" (3 Characters)
○ 1-1/2" Square ■	○ 1/4" (5 Characters)	○ N/A	○ 1/2" (3 Characters)
⦿ 2" Round ●	⦿ 1/4" (6 Characters)	⦿ 1/4" (6 Characters)	⦿ 1/2" (4 Characters*)
○ 2" Square ■	○ 1/4" (6 Characters)	○ 1/4" (6 Characters)	○ 1/2" (4 Characters*)
⊠ 2" Octagon ●	○ 1/4" (6 Characters)	○ 1/4" (6 Characters)	○ 1/2" (4 Characters*)

\*If 3 lines, bottom line is limited to 3 numbers

**Accessories** For other options refer to the Accessories Spec Sheet

<input checked="" type="checkbox"/>	No. 6 Brass Beaded Chain
<input type="checkbox"/>	No. 16 Brass Jack Chain
<input type="checkbox"/>	Brass S Hooks
<input type="checkbox"/>	Zinc Hooks
<input type="checkbox"/>	Nylon Ties

<b>Standards met</b>	ANSI/ASME A13.1-2015 Standards
<b>Installation instructions</b>	Hang from valve stem or valve handle
<b>Temperature resistance</b>	Up to 1200° F / 648°C (ink fill up to 180°F / 82°C)
<b>Water resistance</b>	Good
<b>Finish</b>	Glossy brass finish
<b>Material properties</b>	19 gauge brass (.036 in/0.914 mm)
<b>Colors/fills</b>	Black vinyl filled text (other colors available)
<b>Storage stability</b>	Indefinite
<b>Outdoor durability</b>	3 - 6 Years
<b>Chemical resistance</b>	Ok
<b>Hole</b>	3/16" Top hole
<b>Equivalent to</b>	Brimar stamped brass tags, Seton brass valve tags, Marking Services stamped brass valve tags, Brady stamped brass valve tags

DATE     /     /          JOB \_\_\_\_\_

            MM      DD      YYYY

CONTRACTOR NAME \_\_\_\_\_

Kolbi offers a wide variety of valve tag accessories to ensure your valve tags are properly marked and fastened securely.

**Brass & Stainless Steel Beaded Chain**



**Brass & Stainless Steel Jack Chain**



**Brass & Stainless Steel S Hooks**



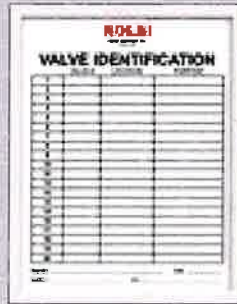
**Vinyl Grid Markers**



**Ceiling Tacks**



**Valve Tag Chart Frame**



**Nylon Ties**



Product Specifications

<input checked="" type="checkbox"/>	<b>Brass Beaded Chain</b>
<b>Description</b>	#16 Polished Brass Beaded Chain. Commonly used accessory for brass valve tags. Chains can be locked together to increase chain length. Sold in packs of 100.
<b>Length</b>	4-1/2" (114mm) Long, Includes Locking Link
<b>Ball diameter</b>	1/8", Will go through our standard valve tag hole
<b>Tensile Strength</b>	20 lbs.

<input type="checkbox"/>	<b>Stainless Steel Beaded Chain</b>
<b>Description</b>	304 Stainless Steel. Most commonly used accessory for stainless steel valve tags. Chains can be locked together to increase chain length. Sold in packs of 100.
<b>Length</b>	4-1/2" (114mm) Long, Includes Locking Link
<b>Ball diameter</b>	1/8", Will go through our standard valve tag hole
<b>Tensile Strength</b>	20 lbs.

<input type="checkbox"/>	<b>Brass Jack Chain</b>
<b>Description</b>	#16 Polished Brass Jack Chain. Can easily open and close links to make various lengths. Commonly Sold with S-Hooks
<b>Length</b>	50ft (15.24m).
<b>Wire diameter</b>	.0625" Wire Diameter, 23 links per foot
<b>Tensile Strength</b>	8 lbs.

<input type="checkbox"/>	<b>Stainless Steel Jack Chain</b>
<b>Description</b>	#16 Stainless Steel Jack Chain. Can easily open and close links to make various lengths. Commonly Sold with S-Hooks
<b>Length</b>	50ft (15.24m).
<b>Wire diameter</b>	.0625" Wire Diameter, 23 links per foot
<b>Tensile Strength</b>	10 lbs.

<input type="checkbox"/>	<b>Brass S-Hooks</b>
<b>Description</b>	Brass S-Hooks are sturdy and easy to open and close. Commonly ordered with Jack Chain. Sold in boxes of 100.
<b>Length</b>	1-1/4" (31.75mm)
<b>Diameter</b>	1/8" (3.175mm) in diameter metal

<input type="checkbox"/>	<b>Stainless Steel S-Hooks</b>
<b>Description</b>	304 Stainless Steel S-Hooks are sturdy and easy to open and close. Commonly ordered with Jack Chain. Sold in boxes of 100.
<b>Length</b>	1" (25.4mm)
<b>Diameter</b>	1/8" (3.175mm) in diameter metal

<input type="checkbox"/>	<b>Vinyl Grid Markers</b>
<b>Description</b>	Used for identifying equipment and valves above the ceiling grid. Our grid markers come in sets of 50 per sheet.
<b>Dimensions</b>	6mil vinyl, 3/4" in diameter.
<b>Standard Colors</b>	Red, Yellow, Blue, Green (custom colors and print available)

<input type="checkbox"/>	<b>Ceiling Tacks</b>
<b>Description</b>	Used for identifying equipment & valves above ceiling tiles. For installation, simply push our tacks into the ceiling tiles.
<b>Dimensions</b>	3/4" in diameter, 1/2" Shank
<b>Standard Colors</b>	Red, Yellow, Blue, Green (custom colors and print available)

<input type="checkbox"/>	<b>Nylon Ties</b>
<b>Description</b>	These cable ties are easy to use and lock quickly and securely.
<b>Dimensions</b>	8ft (203.2 mm).
<b>Tensile Strength</b>	Up to 75 lb.


<input type="checkbox"/>	<b>Valve Tag Chart Frames</b>
<b>Description</b>	Extruded Anodized Aluminum Valve Chart Frame with shatter proof plastic cover.
<b>Dimensions</b>	Holds 8-1/2" x 11" (216mm x 279mm) Chart

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Extruded Anodized Aluminum Valve Chart Frame with shatter proof plastic cover.

## Valve Tag Chart Frame Example



### VALVE IDENTIFICATION

	VALVE #	LOCATION	PURPOSE
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			
11			
12			
13			
14			
15			
16			
17			
18			
19			
20			

Installer \_\_\_\_\_ Date \_\_\_\_/\_\_\_\_/\_\_\_\_  
 System \_\_\_\_\_ Job \_\_\_\_\_

Dimensions

Holds 8-1/2"x11" (216mm x 279mm) Chart

Product Specifications

Project

DATE \_\_\_\_/\_\_\_\_/\_\_\_\_ JOB \_\_\_\_\_  
MM DD YYYY

CONTRACTOR NAME \_\_\_\_\_



Kolbi Engraved Nameplates are designed to meet exact project requirements. These highly durable plates are available in the most commonly used sizes or custom-made to meet a specific need. There are five standard materials, all with beveled edges for a precise and professional look. Precision engraving equipment produces the exact letter size and font needed for optimal viewing from any distance. Ability to vary letter size by line creates plates that are easier to read and meet exact project specifications.

**Engraved Plastic Nameplate Examples**



Nameplate size: 1 x 4 in  
0.5 inch text size (sized to fit also available)



Nameplate Size: 2 x 4 in  
Row one - 3/4 inch text size  
Row two - 3/8 inch text size  
Row three - 1/4 inch text size



Nameplate Size: 2 x 3 in  
Row one - 3/8 inch text size  
Row two - 3/4 inch text size  
Row three & four - 3/16 inch text size



Nameplate Size: 2.5 x 4 in  
1/2 inch text size (sized to fit also available)

*These images are for approximate representation only.*

**Product Specifications**

Nameplate Sizes	
<input type="checkbox"/> 3/4 x 2-1/2 in (19 x 64 mm)	<input type="checkbox"/> 3 x 5 in (76 x 127 mm)
<input type="checkbox"/> 1 x 2 in (25 x 51 mm)	<input type="checkbox"/> 3 x 6 in (76 x 152 mm)
<input type="checkbox"/> 1 x 3 in (25 x 76 mm)	<input type="checkbox"/> 4 x 6 in (102 x 152 mm)
<input type="checkbox"/> 1 x 4 in (35 x 102 mm)	<input type="checkbox"/> 4 x 8 in (102 x 203.2 mm)
<input type="checkbox"/> 1-1/2 x 4 in (38 x 102 mm)	<input type="checkbox"/> 4 x 12 in (102 x 304.8 mm)
<input type="checkbox"/> 2 x 3 in (51 x 76 mm)	<input type="checkbox"/> 6 x 12 in (152 x 304.8 mm)
<input checked="" type="checkbox"/> 2 x 4 in (51 x 102 mm)	<input type="checkbox"/> 8 x 12 in (203.2 x 304.8 mm)
<input type="checkbox"/> 2-1/2 x 4 in (64 x 102 mm)	<input type="checkbox"/> 12 x 12 in (304.8 x 304.8 mm)
<input type="checkbox"/> 2 x 6 in (51 x 152 mm)	<input type="checkbox"/> 12 x 18 in (304.8 x 457.2 mm)
<input type="checkbox"/> 3 x 4 in (76 x 102 mm)	<input type="checkbox"/> Custom Size Required

Colors	
<input checked="" type="checkbox"/>	WHITE/BLACK
<input type="checkbox"/>	BLACK/WHITE
<input type="checkbox"/>	WHITE/RED
<input type="checkbox"/>	WHITE/BLUE
<input type="checkbox"/>	BLACK/ORANGE
<input type="checkbox"/>	WHITE/GREEN
<input type="checkbox"/>	RED/WHITE
<input type="checkbox"/>	WHITE/GREY
<input type="checkbox"/>	BLACK/YELLOW

Text Sizes	Number of Lines			
	1	2	3	4
Sized to fit nameplate	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3/16 in (4.7625 mm)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1/4 in (6.35 mm)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3/8 in (9.525 mm)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1/2 in (12.7 mm)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3/4 in (19.05 mm)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1 in (25.4 mm)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Materials	
<input type="checkbox"/>	1/16" 2-ply Plastic
<input type="checkbox"/>	1/16" Outdoor Material
<input type="checkbox"/>	1/16" 3-Ply Material
<input type="checkbox"/>	1/8" 2-ply Plastic
<input checked="" type="checkbox"/>	1/8" Outdoor Grade Plastic
<input type="checkbox"/>	1/8" 3-ply Material

Mounting Options	
<input type="checkbox"/>	Corner Holes
<input checked="" type="checkbox"/>	Holes Centered Left & Right
<input type="checkbox"/>	Top Corner Holes
<input type="checkbox"/>	Holes Centered Top & Bottom
<input checked="" type="checkbox"/>	Adhesive Backing <small>May combine with any option above</small>

**Physical Properties**

Installation Instructions	For adhesive backing applied to a clean dry surface above 50°F (10°C)
Service Temp	-40°F to 200°F (-40°C to 93°C)
Water Resistance	Good
Finish	Matte
Material Properties	Impact acrylic
Material options	1/16"(1.6mm), 1/8"(3mm), 3ply (double sided)
UV resistant option	UV resistant option available for some colors
Installation Options	Adhesive backing, holes and adhesive backing, magnetic backing
Hole Options	One hole each side centered, holes in corners, holes in top corners
Adhesive Properties	4-Mil acrylic adhesive, adhesive rated from -40°F to 175° F (-40°C to 79.45°C)
Storage Stability	Indefinite when stored at 70°F (21°C) and 50% rh
Outdoor Durability	4 - 6 Years (UV Resistant Material 15+ years)
Chemical Resistance	Resistant to acids, alkalis and salts
Equivalent To	Seton Setonflex, Brimar Briply, Marking Services Inc. MS-264, Brady Engraved Plastic Nameplates

**Project**

DATE _____ / _____ / _____	JOB _____
CONTRACTOR NAME _____	