

**PROJECT: CARMAX THE AUTO SUPERSTORE**  
**ADDRESS: STORE NO. 6075 3835 EASTON NAZARETH HWY EASTON, PA 18045**  
 Date of submission: 7/24/2019  
 Date of plans: 227/2018

Rev (0)

**UNDERGROUND WASTE & VENT LINES**

1-1/2" Waste Line (Underground)	9	10%	10	LF
2" Waste Line (Underground)	14	10%	15	LF
3" Waste Line (Underground)	82	10%	90	LF
4" Waste Line (Underground)	236	10%	260	LF
4" Oil and Waste Line (Underground)	195	10%	214	LF
3" Vent Line (Underground)	24	10%	26	LF

**ABOVEGROUND WASTE & VENT LINES**

**RISERS**

4" Line	6	10%	7	LF
3" Line	58	10%	64	LF
2" Line	235	10%	259	LF

**Connections for Waste, Vent**

<b>Elbows</b>	30	0%	30	EA.
<b>TEES</b>	24	0%	24	EA.
<b>WYE-TEE</b>	25	0%	25	EA.

**SLEEVES SANITARY**

Through Walls	37	0%	37	EA.
---------------	----	----	----	-----

**STORM LINES AG**

6" Storm Line	176	10%	194	LF
3" Storm Line	64	10%	70	LF

**RISERS**

6" Storm Line	34	10%	37	LF
3" Storm Line	34	10%	37	LF

**Pipe Insulation**

R/L 1/2" Thick Insulation for all Sizes of Pipe	291	10%	320	LF
---	-----	-----	-----	----

**Connections Storm**

<b>Elbows</b>	7	0%	7	EA.
<b>WYE-TEE</b>	10	0%	10	EA.

**SLEEVES STORM**

Through Floors	2	0%	2	EA.
Through Walls	7	0%	7	EA.

**ABOVEGROUND Domestic Water Pipe**

**PROJECT: CARMAX THE AUTO SUPERSTORE**

Rev (0)

**ADDRESS: STORE NO. 6075 3835 EASTON NAZARETH HWY EASTON, PA 18045**

Date of submission: 7/24/2019

Date of plans: 227/2018

6" Water Line	5	10%	6	LF
4" Water Line	35	10%	39	LF
3" Water Line	13	10%	14	LF
2-1/2" Water Line	142	10%	157	LF
2" Water Line	67	10%	74	LF
1-1/2" Water Line	14	10%	16	LF
3/4" Water Line	138	10%	152	LF
1/2" Water Line	205	10%	226	LF

**RISERS**

4" Water Line	9	10%	10	LF
2-1/2" Water Line	18	10%	20	LF
2" Water Line	18	10%	20	LF
1-1/2" Water Line	9	10%	10	LF
3/4" Water Line	57	10%	63	LF
1/2" Water Line	153	10%	168	LF

**Pipe Insulation**

CW	1/2" Thick Insulation for all Sizes of Pipe	719	10%	791	LF
HW	1" Thick Insulation for all Sizes of Pipe	164	10%	180	LF

**Connections**

	<b>Elbows</b>	60	0%	60	EA.
	<b>TEE</b>	28	0%	28	EA.

**SLEEVES WATER**

	Through Walls	36	0%	36	EA.
--	---------------	----	----	----	-----

**GAS AND COMPRESS IR LINES AG**

2-1/2" Gas Line	62	10%	68	LF
2" Gas Line	48	10%	53	LF
1-1/4" Gas Line	30	10%	33	LF
1-1/2" Gas Line	102	10%	112	LF
1" Gas Line	23	10%	25	LF
3/4" Compressed Air Line	139	10%	153	LF
1/2" Compressed Air Line	40	10%	44	LF

**RISERS**

2-1/2" Gas Line	16	10%	18	LF
1-1/4" Gas Line	15	10%	17	LF
1-1/2" Gas Line	15	10%	17	LF
1" Gas Line	8	10%	9	LF
3/4" Compressed Air Line	12	10%	13	LF
1/2" Compressed Air Line	52	10%	57	LF

**CONNECTIONS**

	<b>Elbows</b>	42	0%	42	EA.
	<b>TEE</b>	18	0%	18	EA.

**PROJECT: CARMAX THE AUTO SUPERSTORE**  
**ADDRESS: STORE NO. 6075 3835 EASTON NAZARETH HWY EASTON, PA 18045**  
 Date of submission: 7/24/2019  
 Date of plans: 2/27/2018

Rev (0)

### SLEEVES GAS

Through Floors	5	0%	5	EA.
Through Walls	8	0%	8	EA.

### WASTE OR SANITARY FIXTURES

2" WCO: Wall Cleanout	3	0%	3	EA.
4" CO: Cleanout	2	0%	2	EA.
4" GCO: Grade Cleanout	3	0%	3	EA.
2" VTR	2	0%	2	EA.
3" VTR	2	0%	2	EA.
P-1: Water Closet (General)	1	0%	1	EA.
P-1H: Water Closet (ADA)	3	0%	3	EA.
P-2H: Urinal (ADA)	1	0%	1	EA.
P-3: Lavatory - Countertop (ADA)	4	0%	4	EA.
P-4: MOP Receptor	1	0%	1	EA.
P-5: Lavatory - Wall Mounted (ADA)	1	0%	1	EA.
P-6: Electric Water Coolers	2	0%	2	EA.
P-7: Exterior Wall Hydrant	3	0%	3	EA.
P-8: One Compartment Sink	1	0%	1	EA.
P-9: Emergency Eyewash	1	0%	1	EA.
3" FD: Floor Drain	4	0%	4	EA.
Oil Separator Capacity: 1000 Gallons	1	0%	1	EA.
Catch Basin (2'-0" x 2'-0")	2	0%	2	EA.
Catch Basin (1'-0" x 1'-8")	2	0%	2	EA.

### Storm Fixtures

3" Cleanout TEE	2	0%	2	EA.
6" Cleanout TEE	4	0%	4	EA.
3" Wall Spout	1	0%	1	EA.
6" Wall Spout	1	0%	1	EA.
3" RD: Primary Roof Drain	1	0%	1	EA.
3" SRD: Secondary Roof Drain	1	0%	1	EA.
6" RD: Primary Roof Drain	2	0%	2	EA.
6" SRD: Secondary Roof Drain	2	0%	2	EA.

### Domestic Water Fixtures

1/2" Ball Valve	10	0%	10	EA.
3/4" Ball Valve	6	0%	6	EA.
1-1/2" Ball Valve	1	0%	1	EA.
2" Ball Valve	2	0%	2	EA.
3/4" Check Valve	2	0%	2	EA.
Thermal Mixing Valve with Integral Check Valves	1	0%	1	EA.
RHEEM SP2003 Heat Trap Fitting	2	0%	2	EA.
1/2" Drain Valve	2	0%	2	EA.

**PROJECT: CARMAX THE AUTO SUPERSTORE**

Rev (0)

**ADDRESS: STORE NO. 6075 3835 EASTON NAZARETH HWY EASTON, PA 18045**

Date of submission: 7/24/2019

Date of plans: 227/2018

1/2" Temperature & Pressure Relief Valve	2	0%	2	EA.
Pressure Gauge	2	0%	2	EA.
Temperature Probe	1	0%	1	EA.
1/2" Ball Valve (Balancing)	1	0%	1	EA.
Thermometer	2	0%	2	EA.
Thermal Expansion Tank	2	0%	2	EA.
Vacuum Relief Valve	2	0%	2	EA.
Trap Primer	4	0%	4	EA.
Water Heater Shelf	2	0%	2	EA.
Water Hammer Arrestor	3	0%	3	EA.
P-7A: Interior Hose Bibb	2	0%	2	EA.
P-7B: Water Hose Reel	2	0%	2	EA.
WH-1: Electric Water Heater	1	0%	1	EA.
WH-2: Electric Water Heater	1	0%	1	EA.
CP-1: Hot Water Circulation Pump	1	0%	1	EA.

**GAS FIXTURES**

1" Drip/Dirt Pocket	1	0%	1	EA.
1-1/4" Drip/Dirt Pocket	2	0%	2	EA.
1-1/2" Drip/Dirt Pocket	2	0%	2	EA.
Ground Joint Union	5	0%	5	EA.
Automatic Drain Valve pipe to Floor Drain	2	0%	2	EA.
Drip Leg W/ Drain Cock	2	0%	2	EA.
1-1/2" Ball Valve	1	0%	1	EA.
1-1/2" Shut-Off Valve	3	0%	3	EA.
3/4" Ball Valve	1	0%	1	EA.
Filter	1	0%	1	EA.
Pressure Gauge	1	0%	1	EA.
3/4" Ball Valve	12	0%	12	EA.
1/2" Ball Valve	8	0%	8	EA.
1/2" Connecting Hose	6	0%	6	EA.
Wall Mounted Hose Reel	2	0%	2	EA.
Flexible Hose Rated 300 PSI	2	0%	2	EA.
Air Outlet 1/4" NPT Coupler	1	0%	1	EA.
Split Ring Stand-Off Hanger Mounted to Wall	4	0%	4	EA.
Air Hose Reel (Ceiling Mounted)	6	0%	6	EA.
Pipestand	5	0%	5	EA.
AC-1: Air Compressor	1	0%	1	EA.

**PROJECT: CARMAX THE AUTO SUPERSTORE**

Rev (0)

**ADDRESS: STORE NO. 6075 3835 EASTON NAZARETH HWY EASTON, PA 18045**

Date of submission: 7/24/2019

Date of plans: 227/2018

**WASTE OR SANITARY FIXTURES**

2" WCO: Wall Cleanout	3	0%	3	EA.
4" CO: Cleanout	2	0%	2	EA.
4" GCO: Grade Cleanout	3	0%	3	EA.
2" VTR	2	0%	2	EA.
3" VTR	2	0%	2	EA.
<b>P-1: Water Closet (General)</b> Description: 1.1 G.P.F White Acid Resisting Vitreous China, Floor Mounted, Floor Outlet, Elongated Bowl, Top Spud, with Chrome Finish Flush Valve Manufacturer:- - Fixture: American Standard 2855.111 Madera 15"H HET - Flush Valve: American Standard 6047.11 - Seat: American Standard 5901.100 Open Front Less Cover	1	0%	1	EA.
<b>P-1H: Water Closet (ADA)</b> Description: 1.1 G.P.F White Acid Resisting Vitreous China, Floor Mounted, Floor Outlet, Elongated Bowl, Top Spud, with Chrome Finish Flush Valve Manufacturer:- - Fixture: American Standard 2855.111 Madera 15"H HET - Flush Valve: American Standard 6047.11 - Seat: American Standard 5901.100 Open Front Less Cover	3	0%	3	EA.
<b>P-2H: Urinal (ADA)</b> Description: 1.1 G.P.H White Acid Resisting Vitreous China, Wall Hung, 3/4" Top Spud, Washout to Floor Fixture Support and Flush Valve. Install ADA Lip @ 17" AFF, Others 24" AFF Manufacturer:- - Fixture: American Standard 6590.525 - Flush Valve: Sloan 186.0125 - Fixture Support: J.R. Smith or Equal	1	0%	1	EA.
<b>P-3: Lavatory - Countertop (ADA)</b> Description: Metering Faucets, 1-1/4" Grid Drain, with 1-1/2" O.D. Tailpiece, Chrome plated Brass 1-1/2" "P" Trap with Cleanout and Chrome Plated Wheel Stops with Flexible Risers (0.5 GPM Flow) Furnish with Power LFG480-00 Thermal Mixing Valve. Temperature Set 105 Degree F. Manufacturer:- - Fixture: Molded Single Piece W/ Counter. - Faucet: Chicago Faucet 3600-E2805AB Metering, Self Close Temperature Adjust, 25 Gal/Cycle Max, ADA, Pressure Compensating - Insulation Kit: truebro-LAV Guard 12 Second Cycle	4	0%	4	EA.
<b>P-4: MOP Receptor</b> Description: Chemical Resisting Molded Stone, Floor Mounted, Faucet with Bucket Hook and Vacuum Breaker Hose Outlet Faucet with Wall Brace and Factory Furnished 3" Drain and Quick Connector Manufacturer:- - Fixture: FIAT *MSB-2424 - Faucet: FIAT *830-AA	1	0%	1	EA.

**PROJECT: CARMAX THE AUTO SUPERSTORE**

Rev (0)

**ADDRESS: STORE NO. 6075 3835 EASTON NAZARETH HWY EASTON, PA 18045**

Date of submission: 7/24/2019

Date of plans: 227/2018

<p><b>P-5: Lavatory - Wall Mounted (ADA)</b>  Description: 22x19 Wall Hung Stainless Steel Lavatory, 4" Center Set faucet Holes, with Overflow and Wall Bracket. Metering Gooseneck Faucet, 1-1/4" Grid Drain, with 1-1/2" OD. Offset Tailpiece Chrome Plated Brass 1-1/2" "P" Trap with C.O and Chrome Plated Wheel Stops with Flexible Risers. (5 GPM) Insulate Exposing Piping Below Fixture.  Manufacturer:-  - Fixture: ELKAY ELVW02219CS W/Jay R Smith Support  - Faucet: Chicago Faucet 895-556 GNIAFCABCP Metering, Self Close temperature Adjust W/ 0.5 GPM Aerator 0.10 Gal/Cycle, Set 12 Seconds.  - Insulation Kit: Truebro LAV Guard</p>	1	0%	1	EA.
<p><b>P-6: Electric Water Coolers</b>  Description: Two-Level Unit, ADA Compliant, Heavy Gauge Steel Frame, Wheel Stops. Lead-Free Waterways, wall Hanger, Polished Stainless Steel Tops, Push Bar Operation, 8.0 G.P.H Capacity of 50 Degree Drinking Water.  Manufacturer:-  - Fixture: ELKEY *EZSTL8C W/ Optional Stainless Steel Cabinet.  Cane Apron at Service Only</p>	2	0%	2	EA.
<p><b>P-7: Exterior Wall Hydrant</b>  Description: Cast Bronze Box, Chrome Plated Face, Bronze Hydrant, Integral Vacuum Breaker, "T" Handle Key and Bronze Casing with 3/4" Hose Connection. Length as Required for Point of Use. Install 24" Above Finish Grade.  - Fixture: Woodford *B67 Non-Freeze with ASSE 1052 Field Testable Backflow Preventer</p>	3	0%	3	EA.
<p><b>P-8: One Compartment Sink</b>  Description: Type 302 Stainless Steel, Min. 18 Gauge, Sound Deadened, Self Rimming, Four Hole Faucet Drilling, Hi-Arc Faucet , Cup Strainer with 1-1/2" O.D. Tailpiece, Chrome Plated Brass 1-1/2" "P" Trap with C.O and Wheel Stops with Flexible Risers. Provide Garbage Disposal.  Manufacturer:-  - Fixture: ELKAY *LRAD-1919-60-3 (6" Deep)  - Faucet: DELTA 21988LF with Hand Held Spray, 1.0 GPM Aerator, ADA Flat Spec for Faucet  - Garbage Disposer: In-Sink Erator Pro 333</p>	1	0%	1	EA.
<p><b>P-9: Emergency Eyewash</b>  Description: Wall Supported, All Stainless Steel Eye Wash with Hinged Dust Cover, Eye Wash Valve, Yellow Pipe and Fittings.  Manufacturer:-  - Fixure: Bradley *S19224DC with S19 2000 EFX8  Thermal Mixing Valve: Set 65 Degrees F.</p>	1	0%	1	EA.
<p><b>3" FD: Floor Drain</b>  Manufacturer: Jay R. Smith 2005-A  Specs: Lacquered Galvanized Cast Iron Body with Flange, clamping collar, and round, adjustable nickel-bronze strainer and trap primer connection. Strainer to be square where installed in a tile floor.</p>	4	0%	4	EA.
<p><b>Oil Separator</b>  <b>Capacity: 1000 Gallons</b>  <b>Specs:-</b>  Concrete: 4000 PSI at 28 ays  Reinforcement: H-20 Bridge Loading</p>	1	0%	1	EA.

**PROJECT: CARMAX THE AUTO SUPERSTORE**

Rev (0)

**ADDRESS: STORE NO. 6075 3835 EASTON NAZARETH HWY EASTON, PA 18045**

Date of submission: 7/24/2019

Date of plans: 227/2018

<b>Catch Basin (2'-0" x 2'-0")</b> <b>Specs:-</b> Catch Basin Set in Min. 4" Conc. Bedding Conc. Filler Perimeter of Basin Sediment Bucket	2	0%	2	EA.
<b>Catch Basin (1'-0" x 1'-8")</b> <b>Specs:-</b> Catch Basin Set in Min. 4" Conc. Bedding Conc. Filler Perimeter of Basin Sediment Bucket	2	0%	2	EA.

**Storm Fixtures**

<b>3" Cleanout TEE</b> MFG/Mod: Jay R. Smith 45505 Chrome Plated Square Frame & Secure Cover	2	0%	2	EA.
<b>6" Cleanout TEE</b> MFG/Mod: Jay R. Smith 45505 Chrome Plated Square Frame & Secure Cover	4	0%	4	EA.
<b>3" Wall Spout</b> MFG/Model: Jay R. Smith 1770 with Factory Screen	1	0%	1	EA.
<b>6" Wall Spout</b> MFG/Model: Jay R. Smith 1770 with Factory Screen	1	0%	1	EA.
<b>3" RD: Primary Roof Drain</b> <b>Manufacturers:</b> 1. Jay R. Smith 1015 with deck clamp and adjustable extension 2. Zurn Z-100 with deck clamp and adjustable extension 3. Josam 21500 with deck clamp and adjustable extension <b>Showroom Vestibule roof drains to have horizontal discharge:</b> 1. Jay R. Smith 1020 with deck clamp and adjustable extension 2. Zurn Z100-90 with deck clamp and adjustable extension 3. Josam 21500-66 with deck clamp and adjustable extension - Lacquered cast iron body with sump, removable polyethylene dome strainer, membrane flange and membrane clamp with integral gravel stop with adjustable under deck clamp, roof sump receiver, waterproofing flange. - Trim all excess roofing membrane inside the drain to fully expose the drain sump.	1	0%	1	EA.
<b>3" SRD: Secondary Roof Drain</b> <b>Manufacturers:</b> 1. Jay R. Smith 1070 with under deck clamp and adjustable extension 2. Zurn Z-100-W2 with deck clamp and adjustable extension 3. Josam 21500-AE-16 with extension and deck clamp Lacquered cast iron body with sump, removable polyethylene dome strainer, membrane flange and membrane clamp with integral gravel stop with adjustable under deck clamp, roof sump receiver, waterproofing flange, PVC standpipe cut to approximately 2". Where external dam type of drain is used, trim all excess roofing membrane inside the drain to fully expose the drain sump	1	0%	1	EA.

**PROJECT: CARMAX THE AUTO SUPERSTORE**

Rev (0)

**ADDRESS: STORE NO. 6075 3835 EASTON NAZARETH HWY EASTON, PA 18045**

Date of submission: 7/24/2019

Date of plans: 227/2018

<b>6" RD: Primary Roof Drain</b> <b>Manufacturers:</b> 1. Jay R. Smith 1015 with deck clamp and adjustable extension 2. Zurn Z-100 with deck clamp and adjustable extension 3. Josam 21500 with deck clamp and adjustable extension <b>Showroom Vestibule roof drains to have horizontal discharge:</b> 1. Jay R. Smith 1020 with deck clamp and adjustable extension 2. Zurn Z100-90 with deck clamp and adjustable extension 3. Josam 21500-66 with deck clamp and adjustable extension - Lacquered cast iron body with sump, removable polyethylene dome strainer, membrane flange and membrane clamp with integral gravel stop with adjustable under deck clamp, roof sump receiver, waterproofing flange. - Trim all excess roofing membrane inside the drain to fully expose the drain sump.	2	0%	2	EA.
<b>6" SRD: Secondary Roof Drain</b> <b>Manufacturers:</b> 1. Jay R. Smith 1070 with under deck clamp and adjustable extension 2. Zurn Z-100-W2 with deck clamp and adjustable extension 3. Josam 21500-AE-16 with extension and deck clamp Lacquered cast iron body with sump, removable polyethylene dome strainer, membrane flange and membrane clamp with integral gravel stop with adjustable under deck clamp, roof sump receiver, waterproofing flange, PVC standpipe cut to approximately 2". Where external dam type of drain is used, trim all excess roofing membrane inside the drain to fully expose the drain sump	2	0%	2	EA.

**Domestic Water Fixtures**

1/2" Ball Valve	10	0%	10	EA.
3/4" Ball Valve	6	0%	6	EA.
1-1/2" Ball Valve	1	0%	1	EA.
2" Ball Valve	2	0%	2	EA.
3/4" Check Valve	2	0%	2	EA.
Thermal Mixing Valve with Integral Check Valves	1	0%	1	EA.
RHEEM SP2003 Heat Trap Fitting	2	0%	2	EA.
1/2" Drain Valve	2	0%	2	EA.
1/2" Temperature & Pressure Relief Valve	2	0%	2	EA.
Pressure Gauge	2	0%	2	EA.
Temperature Probe	1	0%	1	EA.
1/2" Ball Valve (Balancing)	1	0%	1	EA.
Thermometer	2	0%	2	EA.
<b>Thermal Expansion Tank</b> MFG/Model: Amtrol WX-101	2	0%	2	EA.
<b>Vacuum Relief Valve</b> MFG/Model: WATTS No. N-36	2	0%	2	EA.
<b>Trap Primer</b> MFG/Model: Precision Plumbing Products PR500 W/ Multiple Outlets where required.	4	0%	4	EA.
<b>Water Heater Shelf</b> Fastened Securely to Steel 1/2" Threaded ROD, Extended and Connect to Structure (Typical for 4)	2	0%	2	EA.



**PROJECT: CARMAX THE AUTO SUPERSTORE**

Rev (0)

**ADDRESS: STORE NO. 6075 3835 EASTON NAZARETH HWY EASTON, PA 18045**

Date of submission: 7/24/2019

Date of plans: 227/2018

<b>Water Hammer Arrestor</b> Manufacturer: 1) Jay R. Smith hydrotrol 2) Josam 75000 3) Precision plumbing Products 4) Watts Shoktrol Specs: ANSI A112.26.1; sized in accordance with PDI WH-201, precharged suitable for operation in temperature range -100 to 300 degrees F and maximum 250 psig working pressure; equal to Hydrotrol by Jay R. Smith. Where installed in wall or chase, furnish access panel equal to Jay R. Smith 4434, 8"x8" minimum. Install arrestors above ceiling.	3	0%	3	EA.
<b>P-7A: Interior Hose Bibb</b> Specification: Anti-Contamination, Metal Wheel Handle, 3/4" Outlet with ASSE Field Testable Backflow Preventer, Rough Chrome Finish MFG/Model: Fixture, Woodford 26C W/ Metal Handle and ASSE 1052 Field Testable Backflow Preventer	2	0%	2	EA.
<b>P-7B: Water Hose Reel</b> Specification: Water Hose Rell with Hand Held Spray Nozzle Equal to Gilmour 40GL 90 Furnished Required 3/8"-5/8" Adapter MFG/Model: Reelcraft 5650 OLPI 50 FT 3/8" Hose (Granger*4HK89)	2	0%	2	EA.
<b>WH-1: Electric Water Heater</b> Type: Electric Storage: 30 Gallons Recovery: 15 GPH & 80 Degree Rise Temp.: 120 KW: 3 Electrical: 208/1 Manufacturer: A.O. Smith Model: DEL-30	1	0%	1	EA.
<b>WH-2: Electric Water Heater</b> Type: Electric Storage: 30 Gallons Recovery: 15 GPH & 80 Degree Rise Temp.: 120 KW: 3 Electrical: 208/1 Manufacturer: A.O. Smith Model: DEL-30	1	0%	1	EA.
<b>CP-1: Hot Water Circulation Pump</b> Manufacturer: REMYTEMP Model & Specs: TL4000D on Demand Circulator with TACO 007 IFC Cartridge Circulator, with Integral Check Valve and Isolation Valves, Stainless Steel Temperature Probe, 3 GPM at 10 ft. Head, 1/25 HP, 120V.	1	0%	1	EA.

**GAS FIXTURES**

1" Drip/Dirt Pocket	1	0%	1	EA.
1-1/4" Drip/Dirt Pocket	2	0%	2	EA.
1-1/2" Drip/Dirt Pocket	2	0%	2	EA.
Ground Joint Union	5	0%	5	EA.
Automatic Drain Valve pipe to Floor Drain	2	0%	2	EA.
Drip Leg W/ Drain Cock	2	0%	2	EA.
1-1/2" Ball Valve	1	0%	1	EA.

**PROJECT: CARMAX THE AUTO SUPERSTORE**

Rev (0)

**ADDRESS: STORE NO. 6075 3835 EASTON NAZARETH HWY EASTON, PA 18045**

Date of submission: 7/24/2019

Date of plans: 227/2018

1-1/2" Shut-Off Valve	3	0%	3	EA.
3/4" Ball Valve	1	0%	1	EA.
Filter	1	0%	1	EA.
Pressure Gauge	1	0%	1	EA.
3/4" Ball Valve	12	0%	12	EA.
1/2" Ball Valve	8	0%	8	EA.
1/2" Connecting Hose	6	0%	6	EA.
Wall Mounted Hose Reel	2	0%	2	EA.
Flexible Hose Rated 300 PSI	2	0%	2	EA.
Air Outlet 1/4" NPT Coupler	1	0%	1	EA.
Split Ring Stand-Off Hanger Mounted to Wall	4	0%	4	EA.
<b>Air Hose Reel (Ceiling Mounted)</b>	6	0%	6	EA.
<b>Pipestand</b> Equal to Erico Caddy Pyramid ST-PSF6c with Foam Bottom and PT6F Toll free Support Kit. Max. 8 ft between Supports and within 12" of Both Side of 90 Degree Elbow.	5	0%	5	EA.
<b>AC-1: Air Compressor</b> Type: Rotary Screw Manufacturer: Kaeser Model: Air Center SX/5T Capacity: 21.2 CFM @ 125 PSIG Voltage/Phase: 208/3 Phase HP: 5	1	0%	1	EA.

PROJECT:

ADDRESS:

SCOPE:

## PLUMBING ESTIMATE


<http://www.estimasters.com>

(512) 333-1785

TOTAL BID

\$ -

SR #	DWG. NO.	CSI NO.	DESCRIPTION	QTY.	WASTE	QTY. W/ WASTE	UNIT	Labor Cost	Total Labor Cost	Material Cost	Total Material Cost	Total Unit Cost	TOTAL COST
22 00 00 PLUMBING													
DOMESTIC WATER LINES													
FIRST FLOOR													
INTERIOR (ABOVEGROUND) Copper Tubing ASTM B88, Type L, hard drawn, with cast brass or wrought copper fittings and Grade 95TA solder joints.													
INTERIOR (UNDERGROUND) Water pipe buried under building: Copper Tubing ASTM B88, Type L, annealed with wrought copper fittings and													
WATER LINES													
1	P1.0		1/2" Cold Water Line	28	10%	31	LF	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
2	P1.0		3/4" Cold Water Line	65	10%	72	LF	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
3	P1.0		2-1/2" Cold Water Line	107	10%	117	LF	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
4	P1.0		3" Cold Water Line	13	10%	14	LF	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
5	P1.0		4" Fire Water Line	31	10%	34	LF	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
6	P1.0		6" Fire Water Line	5	10%	6	LF	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
7	P1.0		1/2" Hot Water Line	24	10%	27	LF	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
1/P3.0													
8	P3.0		1/2" Cold Water Line	59	10%	65	LF	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
9	P3.0		3/4" Cold Water Line	41	10%	45	LF	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
10	P3.0		2" Cold Water Line	35	10%	38	LF	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
11	P3.0		2-1/2" Cold Water Line	36	10%	39	LF	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
12	P3.0		4" Fire Water Line	4	10%	5	LF	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
13	P3.0		1/2" Hot Water Line	29	10%	32	LF	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
14	P3.0		3/4" Hot Water Line	22	10%	25	LF	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
15	P3.0		1/2" Hot Recirculation Water Line	21	10%	23	LF	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
2/P3.0													
16	P3.0		1/2" Cold Water Line	34	10%	38	LF	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
17	P3.0		3/4" Cold Water Line	9	10%	10	LF	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
18	P3.0		1-1/2" Cold Water Line	14	10%	16	LF	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
19	P3.0		2" Cold Water Line	20	10%	21	LF	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
20	P3.0		1/2" Hot Water Line	10	10%	11	LF	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
21	P3.0		2" Hot Water Line	13	10%	14	LF	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
RISER													
22	P3.0		1/2" Cold Water Line	117	10%	129	LF	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
23	P3.0		3/4" Cold Water Line	48	10%	53	LF	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
24	P3.0		1-1/2" Cold Water Line	9	10%	10	LF	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
25	P3.0		2" Cold Water Line	18	10%	20	LF	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
26	P3.0		2-1/2" Cold Water Line	18	10%	20	LF	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
27	P3.0		4" Fire Water Line	9	10%	10	LF	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
28	P3.0		1/2" Hot Water Line	27	10%	30	LF	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
29	P3.0		3/4" Hot Water Line	9	10%	10	LF	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
30	P3.0		1/2" Hot Recirculation Water Line	9	10%	10	LF	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Note: For Riser Calculations, 14'-0" Deck Height Assumed.													
INSULATION													
A- Manufacturers: 1. Owens Corning SSL - II 2. Rubatex R - 180 - FS 3. Ceel Tite 320 PVC Jacket													
B- Glass Fiber: ASTM C547; rigid molded, noncombustible. 1. 'K' Value : 0.24 at 75 degrees F. 2. Maximum Service Temperature: 850 degrees 3. Vapor Barrier Jacket: White kraft paper reinforced with glass fiber yarn and bonded to aluminized film, secure with self sealing longitudinal laps and butt strips or with outward clinch expanding staples and vapor barrier mastic.													
C- Jackets PVC Plastic: One piece molded type fitting covers and sheet material, off white color. a) Thickness: 15 mil. b) Connections: Brush on welding adhesive. Pressure													
COLD WATER LINES													
31			1/2" Thick Insulation for all Sizes of Pipe	719	10%	791	LF	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
HOT WATER LINES													
32			1" Thick Insulation for all Sizes of Pipe	164	10%	180	LF	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
CONNECTIONS													
ELBOWS													
33	P1.0 & P3.0		Elbow 1/2"-1/2"	22	0%	22	EA.	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

PROJECT:

ADDRESS:

SCOPE:

## PLUMBING ESTIMATE


<http://www.estimasters.com>

(612) 333-1785

TOTAL BID

\$

-

SR #	DWG. NO.	CSI NO.	DESCRIPTION	QTY.	WASTE	QTY. W/ WASTE	UNIT	Labor Cost	Total Labor Cost	Material Cost	Total Material Cost	Total Unit Cost	TOTAL COST
34	P1.0 & P3.0		Elbow 3/4"-3/4"	20	0%	20	EA.	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
35	P1.0 & P3.0		Elbow 1 1/2"-1 1/2"	1	0%	1	EA.	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
36	P1.0 & P3.0		Elbow 2"-2"	7	0%	7	EA.	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
37	P1.0 & P3.0		Elbow 2 1/2"-2 1/2"	7	0%	7	EA.	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
38	P1.0 & P3.0		Elbow 3"-3"	3	0%	3	EA.	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
			<b>TEES</b>										
39	P1.0 & P3.0		TEE 3/4"-3/4"-1/2"	4	0%	4	EA.	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
40	P1.0 & P3.0		TEE 1 1/2"-1 1/2"-1/2"	7	0%	7	EA.	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
41	P1.0 & P3.0		TEE 2 1/2"-2 1/2"-1/2"	2	0%	2	EA.	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
42	P1.0 & P3.0		TEE 2 1/2"-2 1/2"-3/4"	4	0%	4	EA.	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
43	P1.0 & P3.0		TEE 2"-2"-1/2"	4	0%	4	EA.	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
44	P1.0 & P3.0		TEE 2"-2"-3/4"	3	0%	3	EA.	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
45	P1.0 & P3.0		TEE 2"-2"-2 1/2"	1	0%	1	EA.	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
46	P1.0 & P3.0		TEE 4"-4"-4"	3	0%	3	EA.	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
			<b>FIXTURES</b>										
47	P1.0		1/2" Ball Valve	10	0%	10	EA.	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
48	P1.0		3/4" Ball Valve	6	0%	6	EA.	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
49	P3.0		1-1/2" Ball Valve	1	0%	1	EA.	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
50	P3.0		2" Ball Valve	2	0%	2	EA.	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
51	P1.0		3/4" Check Valve	2	0%	2	EA.	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
52	P1.0		Thermal Mixing Valve with Integral Check Valves	1	0%	1	EA.	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
53	P4.0		RHEEM SP2003 Heat Trap Fitting	2	0%	2	EA.	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
54	P4.0		<b>Water Heater Shelf</b> Fastened Securely to Steel 1/2" Threaded ROD, Extended and Connect to Structure (Typical for 4)	2	0%	2	EA.	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
55	P4.0		1/2" Drain Valve	2	0%	2	EA.	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
56	P4.0		<b>Thermal Expansion Tank</b> MFG/Model: Amtrol WX-101	2	0%	2	EA.	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
57	P4.0		1/2" Temperature & Pressure Relief Valve	2	0%	2	EA.	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
58	P4.0		Pressure Gauge	2	0%	2	EA.	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
59	P4.0		Temperature Probe	1	0%	1	EA.	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
60	P4.0		1/2" Ball Valve (Balancing)	1	0%	1	EA.	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
61	P4.0		Thermometer	2	0%	2	EA.	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
62	P4.0		<b>Vacuum Relief Valve</b> MFG/Model: WATTS No. N-36	2	0%	2	EA.	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
63	P3.0		<b>Trap Primer</b> MFG/Model: Precision Plumbing Products PR500 W/ Multiple Outlets where required.	4	0%	4	EA.	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
64	P3.0		<b>Water Hammer Arrestor</b> Manufacturer: 1) Jay R. Smith hydrotrol 2) Josam 75000 3) Precision plumbing Products 4) Watts Shoktrol Specs: ANSI A112.26.1; sized in accordance with PDI WH- 201, precharged suitable for operation in temperature range -100 to 300 degrees F and maximum 250 psig working pressure; equal to Hydrotrol by Jay R. Smith. Where installed in wall or chase, furnish access panel equal to Jay R. Smith 4434, 8"x8" minimum. Install arrestors above ceiling.	3	0%	3	EA.	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
65	P1.0		<b>P-7A: Interior Hose Bibb</b> Specification: Anti-Contamination, Metal Wheel Handle, 3/4" Outlet with ASSE Field Testable Backflow Preventer, Rough Chrome Finish MFG/Model: Fixture, Woodford 26C W/ Metal Handle and ASSE 1052 Field Testable Backflow Preventer	2	0%	2	EA.	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
66	P1.0		<b>P-7B: Water Hose Reel</b> Specification: Water Hose Reel with Hand Held Spray Nozzle Equal to Gilmour 40GL 90 Furnished Required 3/8"- 5/8" Adapter MFG/Model: Reelcraft 5650 OLPI 50 FT 3/8" Hose (Granger*4HK89)	2	0%	2	EA.	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
67	P1.0		<b>WH-1: Electric Water Heater</b> Type: Electric Storage: 30 Gallons Recovery: 15 GPH & 80 Degree Rise Temp.: 120 KW: 3 Electrical: 208/1 Manufacturer: A.O. Smith Model: DEL-30	1	0%	1	EA.	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
68	P1.0		<b>WH-2: Electric Water Heater</b> Type: Electric Storage: 30 Gallons Recovery: 15 GPH & 80 Degree Rise Temp.: 120 KW: 3 Electrical: 208/1 Manufacturer: A.O. Smith Model: DEL-30	1	0%	1	EA.	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

PROJECT:

ADDRESS:

SCOPE:

## PLUMBING ESTIMATE


<http://www.estimasters.com>

(612) 333-1785

TOTAL BID \$ -

SR #	DWG. NO.	CSI NO.	DESCRIPTION	QTY.	WASTE	QTY. W/ WASTE	UNIT	Labor Cost	Total Labor Cost	Material Cost	Total Material Cost	Total Unit Cost	TOTAL COST
69	P4.0		<b>CP-1: Hot Water Circulation Pump</b> Manufacturer: REMYTEMP Model & Specs: TL4000D on Demand Circulator with TACO 007 IFC Cartridge Circulator, with Integral Check Valve and Isolation Valves, Stainless Steel Temperature Probe, 3 GPM at 10 ft. Head, 1/25 HP, 120V.	1	0%	1	EA.	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
			<b>SLEEVES</b>										
70			Sleeves through Wall	36	0%	36	EA.	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
			<b>Sub Total</b>										\$ -
<b>SANITARY/WASTE &amp; VENT PIPES</b>													
<b>FIRST FLOOR</b>													
<b>SANITARY PIPING (WASTE &amp; VENT)</b>													
<b>INTERIOR (ABOVE GROUND AND HOUSE DRAIN)</b> Coated cast iron soil pipe shall be service weight no-hub pattern utilizing service weight no-hub pattern fittings and shall be used on the following service. Joints shall be secured with neoprene compression gaskets and stainless steel couplings with stainless steel bolts and nuts													
<b>INTERIOR UNDERGROUND</b> Coated cast iron soil pipe conforming to ASTM A74 shall be service weight hub and spigot pattern utilizing service weight hub and spigot fittings and shall be used on the following services. Joints shall be secured with neoprene compression gaskets													
<b>WASTE OR SANITARY LINES</b>													
71	P1.0		4" Waste Line (Underground)	190	10%	209	LF	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
72	P1.0		4" Oil and Waste Line (Underground)	195	10%	214	LF	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
<b>VENT LINES</b>													
73	P1.0		3" Vent Line (Underground)	24	10%	27	LF	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
<b>1/P3.0</b>													
74	P3.0		1-1/2" Waste Line (Underground)	7	10%	7	LF	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
75	P3.0		2" Waste Line (Underground)	6	10%	6	LF	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
76	P3.0		3" Waste Line (Underground)	67	10%	74	LF	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
77	P3.0		4" Waste Line (Underground)	29	10%	32	LF	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
78	P3.0		2" Vent Line	93	10%	102	LF	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
<b>2/P3.0</b>													
79	P3.0		1-1/2" Waste Line (Underground)	2	10%	2	LF	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
80	P3.0		2" Waste Line (Underground)	9	10%	9	LF	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
81	P3.0		3" Waste Line (Underground)	14	10%	16	LF	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
82	P3.0		4" Waste Line (Underground)	17	10%	19	LF	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
83	P3.0		2" Vent Line	23	10%	25	LF	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
<b>RISER</b>													
84	P3.0		2" Waste Line	9	10%	10	LF	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
85	P3.0		3" Waste Line	35	10%	39	LF	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
86	P3.0		4" Waste Line	6	10%	7	LF	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
87	P3.0		2" Vent Line	99	10%	109	LF	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
88	P3.0		3" Vent Line	11	10%	12	LF	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
<b>CONNECTIONS</b>													
<b>ELBOWS</b>													
89	P1.0 & P3.0		Elbow 1 1/2"-1 1/2"	4	0%	4	EA.	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
90	P1.0 & P3.0		Elbow 2"-2"	11	0%	11	EA.	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
91	P1.0 & P3.0		Elbow 3"-3"	13	0%	13	EA.	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
92	P1.0 & P3.0		Elbow 4"-4"	2	0%	2	EA.	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
<b>TEES</b>													
93	P1.0 & P3.0		TEE 2"-2"-2"	10	0%	10	EA.	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
94	P1.0 & P3.0		TEE 3"-3"-2"	9	0%	9	EA.	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
95	P1.0 & P3.0		TEE 4"-4"-2"	4	0%	4	EA.	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
96	P1.0 & P3.0		TEE 4"-4"-3"	1	0%	1	EA.	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
<b>WYE-TEE</b>													
97	P1.0 & P3.0		WYE 3"-3"-3"	2	0%	2	EA.	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
98	P1.0 & P3.0		WYE 4"-3"-3"	2	0%	2	EA.	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
99	P1.0 & P3.0		WYE 4"-4"-1 1/2"	4	0%	4	EA.	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
100	P1.0 & P3.0		WYE 4"-4"-2"	1	0%	1	EA.	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
101	P1.0 & P3.0		TEE 4"-4"-3"	1	0%	1	EA.	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
102	P1.0 & P3.0		TEE 4"-4"-4"	15	0%	15	EA.	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
<b>FIXTURES</b>													

PROJECT:

ADDRESS:

SCOPE:

## PLUMBING ESTIMATE


<http://www.estimasters.com>

(512) 333-1785

TOTAL BID \$ -

SR #	DWG. NO.	CSI NO.	DESCRIPTION	QTY.	WASTE	QTY. W/ WASTE	UNIT	Labor Cost	Total Labor Cost	Material Cost	Total Material Cost	Total Unit Cost	TOTAL COST
103	P3.0		2" WCO: Wall Cleanout	3	0%	3	EA.	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
104	P3.0		4" CO: Cleanout	2	0%	2	EA.	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
105	P3.0		4" GCO: Grade Cleanout	3	0%	3	EA.	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
106	P3.0		<b>P-1: Water Closet (General)</b> Description: 1.1 G.P.F White Acid Resisting Vitreous China, Floor Mounted, Floor Outlet, Elongated Bowl, Top Spud, with Chrome Finish Flush Valve Manufacturer:- - Fixture: American Standard 2855.111 Madera 15"H HET - Flush Valve: American Standard 6047.11 - Seat: American Standard 5901.100 Open Front Less	1	0%	1	EA.	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
107	P3.0		<b>P-1H: Water Closet (ADA)</b> Description: 1.1 G.P.F White Acid Resisting Vitreous China, Floor Mounted, Floor Outlet, Elongated Bowl, Top Spud, with Chrome Finish Flush Valve Manufacturer:- - Fixture: American Standard 2855.111 Madera 15"H HET - Flush Valve: American Standard 6047.11 - Seat: American Standard 5901.100 Open Front Less	3	0%	3	EA.	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
108	P3.0		<b>P-2H: Urinal (ADA)</b> Description: 1.1 G.P.H White Acid Resisting Vitreous China, Wall Hung, 3/4" Top Spud, Washout to Floor Fixture Support and Flush Valve. Install ADA Lip @ 17" AFF, Others 24" AFF Manufacturer:- - Fixture: American Standard 6590.525 - Flush Valve: Sloan 186.0125	1	0%	1	EA.	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
109	P3.0		<b>P-3: Lavatory - Countertop (ADA)</b> Description: Metering Faucets, 1-1/4" Grid Drain, with 1-1/2" O.D. Tailpiece, Chrome plated Brass 1-1/2" "P" Trap with Cleanout and Chrome Plated Wheel Stops with Flexible Risers (0.5 GPM Flow) Furnish with Power LFG480-00 Thermal Mixing Valve. Temperature Set 105 Degree F. Manufacturer:- - Fixture: Molded Single Piece W/ Counter. - Faucet: Chicago Faucet 3600-E2805AB Metering, Self Close Temperature Adjust, 25 Gal/Cycle Max, ADA, Pressure Compensating - Insulation Kit: truebro-LAV Guard 12 Second Cycle	4	0%	4	EA.	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
110	P3.0		<b>P-4: MOP Receptor</b> Description: Chemical Resisting Molded Stone, Floor Mounted, Faucet with Bucket Hook and Vacuum Breaker Hose Outlet Faucet with Wall Brace and Factory Furnished 3" Drain and Quick Connector Manufacturer:- - Fixture: FIAT *MSB-2424 - Faucet: FIAT *830-AA	1	0%	1	EA.	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

PROJECT:

ADDRESS:

SCOPE:

## PLUMBING ESTIMATE


<http://www.estimasters.com>

(512) 333-1785

TOTAL BID

\$

-

SR #	DWG. NO.	CSI NO.	DESCRIPTION	QTY.	WASTE	QTY. W/ WASTE	UNIT	Labor Cost	Total Labor Cost	Material Cost	Total Material Cost	Total Unit Cost	TOTAL COST
111	P3.0		<b>P-5: Lavatory - Wall Mounted (ADA)</b> Description: 22x19 Wall Hung Stainless Steel Lavatory, 4" Center Set faucet Holes, with Overflow and Wall Bracket. Metering Gooseneck Faucet, 1-1/4" Grid Drain, with 1-1/2" OD. Offset Tailpiece Chrome Plated Brass 1-1/2" "P" Trap with C.O and Chrome Plated Wheel Stops with Flexible Risers. (5 GPM) Insulate Exposing Piping Below Fixture. Manufacturer:- - Fixture: ELKAY ELVW02219CS W/Jay R Smith Support - Faucet: Chicago Faucet 895-556 GNIAFCABCP Metering, Self Close temperature Adjust W/ 0.5 GPM Aerator 0.10 Gal/Cycle, Set 12 Seconds. - Insulation Kit: Truebro LAV Guard	1	0%	1	EA.	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
112	P3.0		<b>P-6: Electric Water Coolers</b> Description: Two-Level Unit, ADA Compliant, Heavy Gauge Steel Frame, Wheel Stops. Lead-Free Waterways, wall Hanger, Polished Stainless Steel Tops, Push Bar Operation, 8.0 G.P.H Capacity of 50 Degree Drinking Water. Manufacturer:- - Fixture: ELKEY *EZSTL8C W/ Optional Stainless Steel Cabinet.	2	0%	2	EA.	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
113	P3.0		<b>P-7: Exterior Wall Hydrant</b> Description: Cast Bronze Box, Chrome Plated Face, Bronze Hydrant, Integral Vacuum Breaker, "T" Handle Key and Bronze Casing with 3/4" Hose Connection. Length as Required for Point of Use. Install 24" Above Finish Grade. - Fixture: Woodford *B67 Non-Freeze with ASSE 1052 Field Testable Backflow Preventer	3	0%	3	EA.	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
114	P3.0		<b>P-8: One Compartment Sink</b> Description: Type 302 Stainless Steel, Min. 18 Gauge, Sound Deadened, Self Rimming, Four Hole Faucet Drilling, Hi-Arc Faucet, Cup Strainer with 1-1/2" O.D. Tailpiece, Chrome Plated Brass 1-1/2" "P" Trap with C.O and Wheel Stops with Flexible Risers. Provide Garbage Disposal. Manufacturer:- - Fixture: ELKAY *LRAD-1919-60-3 (6" Deep) - Faucet: DELTA 21988LF with Hand Held Spray, 1.0 GPM Aerator, ADA Flat Spec for Faucet - Garbage Disposer: In-Sink Erator Pro 333	1	0%	1	EA.	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
115	P3.0		<b>P-9: Emergency Eyewash</b> Description: Wall Supported, All Stainless Steel Eye Wash with Hinged Dust Cover, Eye Wash Valve, Yellow Pipe and Fittings. Manufacturer:- - Fixture: Bradley *S19224DC with S19 2000 EFX8	1	0%	1	EA.	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
116	P3.0		<b>3" FD: Floor Drain</b> Manufacturer: Jay R. Smith 2005-A Specs: Lacquered Galvanized Cast Iron Body with Flange, clamping collar, and round, adjustable nickel-bronze strainer and trap primer connection. Strainer to be square where installed in a tile floor.	4	0%	4	EA.	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
117	P1.0		<b>Oil Separator</b> Capacity: 1000 Gallons Specs:- Concrete: 4000 PSI at 28 ays Reinforcement: H-20 Bridge Loading	1	0%	1	EA.	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
118	P1.0		<b>Catch Basin (2'-0" x 2'-0")</b> Specs:- Catch Basin Set in Min. 4" Conc. Bedding Conc. Filler Perimeter of Basin Sediment Bucket	2	0%	2	EA.	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
119	P1.0		<b>Catch Basin (1'-0" x 1'-8")</b> Specs:- Catch Basin Set in Min. 4" Conc. Bedding Conc. Filler Perimeter of Basin Sediment Bucket	2	0%	2	EA.	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
<b>ROOF FLOOR</b>													
<b>RISER</b>													
120	P3.0		2" Vent Line	12	10%	13	LF	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
121	P3.0		3" Vent Line	12	10%	13	LF	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
<b>FIXTURES</b>													
122	P2.0		2" VTR	2	0%	2	EA.	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
123	P2.0		3" VTR	2	0%	2	EA.	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
<b>SLEEVES</b>													
124			Sleeves through Wall	37	0%	37	EA.	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
<b>Sub Total</b>													\$ -

PROJECT:  
ADDRESS:  
SCOPE:

**PLUMBING ESTIMATE**



<http://www.estimasters.com>  
(512) 333-1785

TOTAL BID \$ -

SR #	DWG. NO.	CSI NO.	DESCRIPTION	QTY.	WASTE	QTY. W/ WASTE	UNIT	Labor Cost	Total Labor Cost	Material Cost	Total Material Cost	Total Unit Cost	TOTAL COST
<b>STORM PIPES</b>													
<b>FIRST FLOOR</b>													
<b>STORM PIPING (WASTE &amp; VENT)</b>													
<b>INTERIOR (ABOVE GROUND AND HOUSE DRAIN)</b>													
Coated cast iron soil pipe shall be service weight no-hub pattern utilizing service weight no-hub pattern fittings and shall be used on the following service. Joints shall be secured with neoprene compression gaskets and stainless steel couplings with stainless steel bolts and nuts													
<b>INTERIOR UNDERGROUND</b>													
Coated cast iron soil pipe conforming to ASTM A74 shall be service weight hub and spigot pattern utilizing service weight hub and spigot fittings and shall be used on the following services. Joints shall be secured with neoprene compression gaskets													
<b>STORM LINES</b>													
125	P1.0		3" Storm Line	18	10%	19	LF	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
126	P1.0		6" Storm Line	13	10%	14	LF	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -



**PROJECT:**  
**ADDRESS:**  
**SCOPE:**

**PLUMBING ESTIMATE**



<http://www.estimasters.com>  
**(612) 333-1785**

**TOTAL BID** \$ -

SR #	DWG. NO.	CSI NO.	DESCRIPTION	QTY.	WASTE	QTY. W/ WASTE	UNIT	Labor Cost	Total Labor Cost	Material Cost	Total Material Cost	Total Unit Cost	TOTAL COST
<b>RISER</b>													
127	P1.0		3" Storm Line	34	10%	37	LF	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
128	P1.0		6" Storm Line	34	10%	37	LF	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
<b>INSULATION</b>													
<b>A- Manufacturers:</b> 1. Owens Corning SSL - II 2. Rubatex R - 180 - FS 3. Ceel Tite 320 PVC Jacket <b>B- Glass Fiber: ASTM C547; rigid molded, noncombustible.</b> 1. 'K' Value : 0.24 at 75 degrees F. 2. Maximum Service Temperature: 850 degrees 3. Vapor Barrier Jacket: White kraft paper reinforced with glass fiber yarn and bonded to aluminized film, secure with self sealing longitudinal laps and butt strips or with outward clinch expanding staples and vapor barrier mastic. <b>C- Jackets</b> PVC Plastic: One piece molded type fitting covers and sheet material, off white color. a) Thickness: 15 mil. b) Connections: Brush on welding adhesive. Pressure													
<b>Rain Leader Insulation</b>													
129			1/2" Thick Insulation for all Sizes of Pipe	81	10%	89	LF	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
<b>CONNECTIONS</b>													
<b>ELBOWS</b>													
130	P1.0		Elbow 3"-3"	1	0%	1	EA.	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
131	P1.0		Elbow 6"-6"	2	0%	2	EA.	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
<b>WYE-TEE</b>													
132	P1.0		WYE 3"-3"-3"	1	0%	1	EA.	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
<b>ROOF FLOOR</b>													
<b>STORM LINES</b>													
133	P2.0		3" Storm Line	47	10%	51	LF	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
134	P2.0		6" Storm Line	163	10%	180	LF	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
<b>INSULATION</b>													
<b>Rain Leader Insulation</b>													
135			1/2" Thick Insulation for all Sizes of Pipe	210	10%	231	LF	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
<b>CONNECTIONS</b>													
<b>ELBOWS</b>													
136	P2.0		Elbow 3"-3"	2	0%	2	EA.	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
137	P2.0		Elbow 6"-6"	2	0%	2	EA.	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
<b>WYE-TEE</b>													
138	P2.0		WYE 6"-6"-6"	9	0%	9	EA.	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
<b>FIXTURES</b>													
139	P1.0		3" Cleanout TEE MFG/Mod: Jay R. Smith 45505 Chrome Plated Square Frame & Secure Cover	2	0%	2	EA.	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
140	P1.0		6" Cleanout TEE MFG/Mod: Jay R. Smith 45505 Chrome Plated Square Frame & Secure Cover	4	0%	4	EA.	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
141	P1.0		3" Wall Spout MFG/Model: Jay R. Smith 1770 with Factory Screen	1	0%	1	EA.	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
142	P1.0		6" Wall Spout MFG/Model: Jay R. Smith 1770 with Factory Screen	1	0%	1	EA.	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
143	P2.0		3" RD: Primary Roof Drain <b>Manufacturers:</b> 1. Jay R. Smith 1015 with deck clamp and adjustable extension 2. Zurn Z-100 with deck clamp and adjustable extension 3. Josam 21500 with deck clamp and adjustable extension <b>Showroom Vestibule roof drains to have horizontal discharge:</b> 1. Jay R. Smith 1020 with deck clamp and adjustable extension 2. Zurn Z100-90 with deck clamp and adjustable extension 3. Josam 21500-66 with deck clamp and adjustable extension - Lacquered cast iron body with sump, removable polyethylene dome strainer, membrane flange and	1	0%	1	EA.	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

PROJECT:  
ADDRESS:  
SCOPE:

PLUMBING ESTIMATE



<http://www.estimasters.com>  
(512) 333-1785

TOTAL BID \$ -

SR #	DWG. NO.	CSI NO.	DESCRIPTION	QTY.	WASTE	QTY. W/ WASTE	UNIT	Labor Cost	Total Labor Cost	Material Cost	Total Material Cost	Total Unit Cost	TOTAL COST
144	P2.0		<b>3" SRD: Secondary Roof Drain</b> <b>Manufacturers:</b> 1. Jay R. Smith 1070 with under deck clamp and adjustable extension 2. Zurn Z-100-W2 with deck clamp and adjustable extension 3. Josam 21500-AE-16 with extension and deck clamp Lacquered cast iron body with sump, removable polyethylene dome strainer, membrane flange and membrane clamp with integral gravel stop with adjustable under deck clamp, roof sump receiver, waterproofing flange, PVC standpipe cut to approximately 2". Where external dam type of drain is used, trim all excess	1	0%	1	EA.	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

PROJECT:

ADDRESS:

SCOPE:

PLUMBING ESTIMATE



http://www.estimasters.com

(512) 333-1785

TOTAL BID \$ -

Table with columns: SR #, DWG. NO., CSI NO., DESCRIPTION, QTY., WASTE, QTY. W/WASTE, UNIT, Labor Cost, Total Labor Cost, Material Cost, Total Material Cost, Total Unit Cost, TOTAL COST. Rows include items like 6" RD: Primary Roof Drain, 6" SRD: Secondary Roof Drain, SLEEVES, GAS PIPES, GAS AND COMPRESSED AIR PIPING, GAS LINES, RISER, CONNECTIONS, ELBOWS, and TEES.

PROJECT:

ADDRESS:

SCOPE:

## PLUMBING ESTIMATE


<http://www.estimasters.com>

(612) 333-1785

TOTAL BID \$ -

SR #	DWG. NO.	CSI NO.	DESCRIPTION	QTY.	WASTE	QTY. W/ WASTE	UNIT	Labor Cost	Total Labor Cost	Material Cost	Total Material Cost	Total Unit Cost	TOTAL COST		
<b>ROOF FLOOR</b>															
<b>GAS LINES</b>															
176	P2.0		1" Gas Line	5	10%	6	LF	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -		
177	P2.0		1-1/4" Gas Line	5	10%	6	LF	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -		
178	P2.0		1-1/2" Gas Line	3	10%	4	LF	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -		
<b>RISER</b>															
179	Note: 1/P2.0		1" Gas Line	3	10%	3	LF	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -		
180	Note: 1/P2.0		1-1/4" Gas Line	5	10%	6	LF	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -		
181	Note: 1/P2.0		1-1/2" Gas Line	5	10%	6	LF	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -		
<b>CONNECTIONS</b>															
<b>ELBOWS</b>															
182	P2.0		Elbow 1 1/4"-1 1/4"	2	0%	2	EA.	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -		
183	P2.0		Elbow 1 1/2"-1 1/2"	1	0%	1	EA.	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -		
184	P2.0		Elbow 1"-1"	2	0%	2	EA.	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -		
<b>FIXTURES</b>															
185	P1.0		1" Drip/Dirt Pocket	1	0%	1	EA.	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -		
186	P1.0		1-1/4" Drip/Dirt Pocket	2	0%	2	EA.	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -		
187	P1.0		1-1/2" Drip/Dirt Pocket	2	0%	2	EA.	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -		
188	P1.0		Ground Joint Union	5	0%	5	EA.	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -		
189	P1.0		Automatic Drain Valve pipe to Floor Drain	2	0%	2	EA.	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -		
190	P1.0		Drip Leg W/ Drain Cock	2	0%	2	EA.	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -		
191	P1.0		1-1/2" Ball Valve	1	0%	1	EA.	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -		
192	P1.0		1-1/2" Shut-Off Valve	3	0%	3	EA.	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -		
193	P1.0		3/4" Ball Valve	1	0%	1	EA.	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -		
194	P1.0		Filter	1	0%	1	EA.	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -		
195	P1.0		Pressure Gauge	1	0%	1	EA.	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -		
196	P1.0		3/4" Ball Valve	12	0%	12	EA.	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -		
197	P1.0		1/2" Ball Valve	8	0%	8	EA.	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -		
198	P1.0		1/2" Connecting Hose	6	0%	6	EA.	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -		
199	P1.0		Wall Mounted Hose Reel	2	0%	2	EA.	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -		
200	P1.0		Flexible Hose Rated 300 PSI	2	0%	2	EA.	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -		
201	P1.0		Air Outlet 1/4" NPT Coupler	1	0%	1	EA.	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -		
202	P1.0		Split Ring Stand-Off Hanger Mounted to Wall	4	0%	4	EA.	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -		
203	P1.0		<b>Air Hose Reel (Ceiling Mounted)</b> MFG/Model: REELCRAFT 5650 OLP1 Specs: Gringer Part *4HK89. 50'-3/8" I.D Hose with Stop, Milton *S718-3/8" Female M-Style Coupler Unit.	6	0%	6	EA.	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -		
204	P1.0		<b>Pipestand</b> Equal to Erico Caddy Pyramid ST-PSF6c with Foam Bottom and PT6F Toll free Support Kit. Max. 8 ft between Supports and within 12" of Both Side of 90 Degree Elbow.	5	0%	5	EA.	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -		
205	P1.0		<b>AC-1: Air Compressor</b> Type: Rotary Screw Manufacturer: Kaeser Model: Air Center SX/ST Capacity: 21.2 CFM @ 125 PSIG Voltage/Phase: 208/3 Phase HP: 5	1	0%	1	EA.	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -		
<b>SLEEVES</b>															
206			Sleeves through Floor	5	0%	5	EA.	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -		
207			Sleeves through Wall	8	0%	8	EA.	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -		
<b>Sub Total</b>												\$	-	\$	-
<b>PROJECT MANAGER &amp; SUPERVISION</b>												10%	\$	-	
<b>GC GENERAL REQUIREMENTS</b>												3%	\$	-	
<b>GENERAL REQUIREMENTS</b>												5%	\$	-	
<b>PRICE OVERHEAD</b>												8%	\$	-	
<b>PRICE FEE</b>												3%	\$	-	
<b>BOND &amp; INSURANCE</b>												3%	\$	-	
<b>TOTAL BASE BID</b>												\$	-	\$	-