

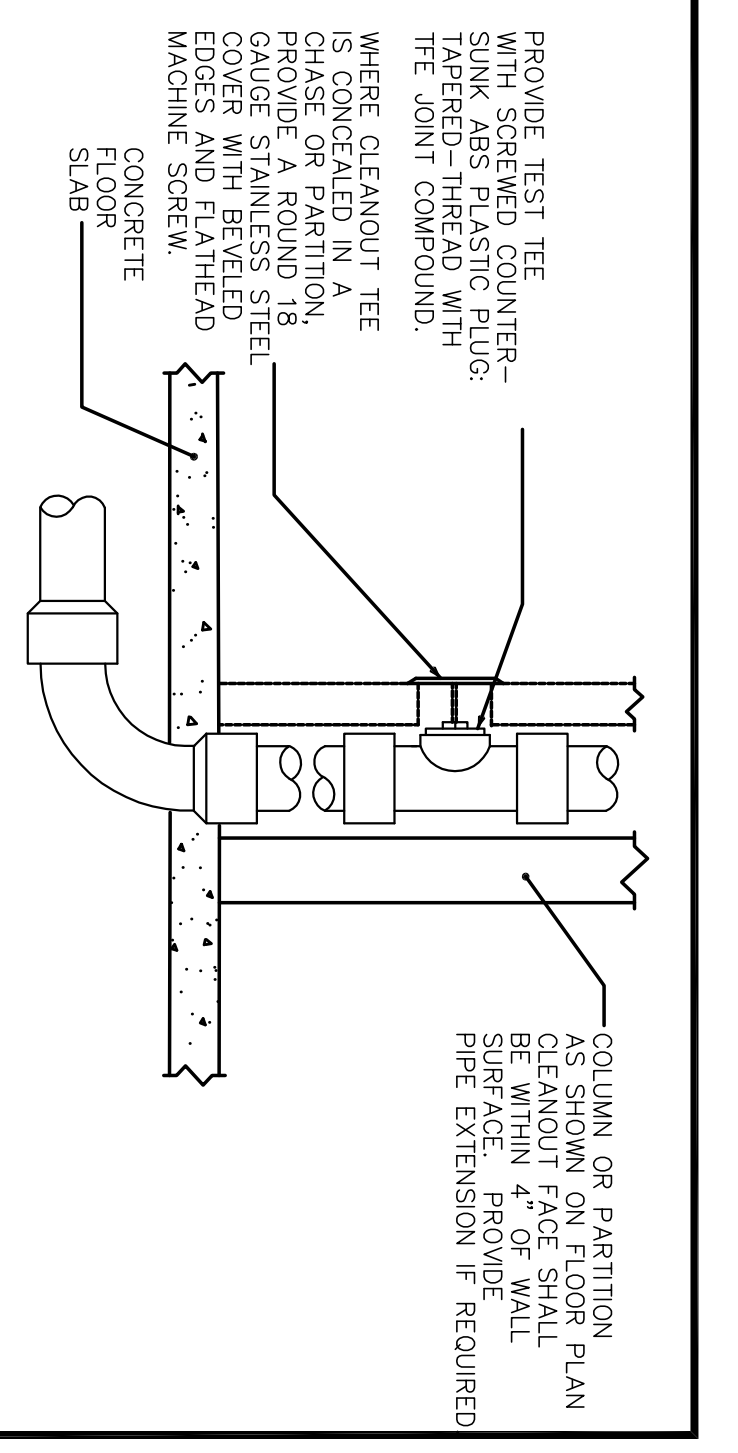
**PLUMBING GENERAL NOTES AND SPECIFICATIONS:**

1. A. SCOPE OF WORK:  
 THE WORK SHALL INCLUDE ALL PLUMBING NECESSARY SHOWN ON THE DRAWINGS, SPECIFIED HEREIN AND/OR AS NEEDED FOR A COMPLETE SYSTEM, INCLUDING BUT NOT NECESSARILY LIMITED TO:  
 1. DOMESTIC COLD AND HOT WATER PIPING SYSTEMS  
 2. SANITARY DRAIN AND VENT SYSTEMS  
 3. SANITARY WATER SYSTEMS  
 4. PRESSURE & TEMPERATURE RELIEF AND PAN DRAIN FROM WATER HEATER.  
 5. PIPING INSULATION  
 6. SUPPORTS AND HANGERS

- B. ALL PLUMBING WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE LATEST EDITION OF THE "FLORIDA BUILDING CODE" AND LOCAL ORDINANCES AND IN COMPLIANCE WITH THE "FLORIDA ENERGY EFFICIENCY CODE FOR BUILDING CONSTRUCTION" AND THE REGULATIONS IN THE ENERGY CONSERVATION CONSTRUCTION CODE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL PERMITS AND SIZES OF ALL EXISTING LINES FOR CONNECTION BEFORE INSTALLATION OF ANY PIPING.  
 UNDERGROUND METAL PIPING SHALL BE PROTECTED WITH A COAT OF BITUMINOUS COMPOUND BEFORE COVERING.  
 WATER-HAMMER ARRESTORS SHALL BE INSTALLED WHERE QUICK-CLOSING VALVES ARE UTILIZED, UNLESS OTHERWISE APPROVED. WATER-HAMMER ARRESTORS SHALL CONFORM TO ASSE 1008. ACCESS SHALL BE PROVIDED TO WATER-HAMMER ARRESTORS. PLUMBING FIXTURES TO HAVE TRAP PRIMERS 1/2" LINE FROM THE NEAREST  
 4. PLUMBING FIXTURES SHALL BE CONSTRUCTED WITH THE APPROVED MATERIALS, SCHEDULE 40 PIPE, UNLESS OTHERWISE APPROVED. ALL FIXTURE TRIM TO BE CHROME PLATED. PLUMBING FIXTURES SHALL BE PROVIDED WITH SUPPORTS, HANGERS, ETC.  
 5. WASTE LINES 3" OR MORE, SLOPE @ 1/8" / FT. AND UNDER, SLOPE @ 1/4" / FT.  
 6. PROVIDE FULLY ACCESSIBLE CLEAN OUTS ON SANITARY AND ANY WASTE PIPING AT EVERY CHANGE OF DIRECTION, AND AT BOTTOM OF STACKS. ACCORDING TO CODE, WALL CLEAN OUT SPACE ROOMS, THEY MUST BE LOCATED UNDER SINKS, LAVATORIES & CABINETS.  
 7. THE MAXIMUM WATER CONSUMPTION FLOW RATES AND QUANTITIES FOR ALL PLUMBING FIXTURES SHALL BE IN ACCORDANCE WITH TABLE 604.4 F.B.C.  
 8. CONTRACTOR SHALL COORDINATE WITH OWNER AMOUNT & LOCATION OF HOSE BIBBS PRIOR TO INSTALLATION.  
 9. 12. PIPING  
 A. SUPPORT ALL PIPE FROM SOUND PORTIONS OF STRUCTURE AND AT PROPER INTERVALS ACCORDING WITH CODE.  
 B. PROVIDE SLEEVES FOR ALL PIPING PASSING THROUGH FOUNDATION SLABS OR MASONRY WALLS. GULF OPENINGS BETWEEN PIPE AND SLEEVES.  
 C. WHERE EXPOSED PIPES PASS THROUGH FLOORS, WALLS, OR CEILINGS, PROVIDE ESUTOHONS FIRMLY SECURED TO THE PIPES AND OF SUFFICIENT OUTSIDE DIAMETER TO COVER THE STEVED OPENINGS FOR THE PIPES. PROVIDE CHROMIUM PLATED ESUTOHONS IN BATHROOMS.  
 D. LOCATION OF FULL-OPEN VALVES, AS PER FPC 606.1  
 E. SANITARY WASTE, VENTS & STORM DRAIN SHALL BE APPROVED PVC SCHEDULE 40 SCHEDULE 40 PIPE & FITTINGS.  
 F. PROVIDE PIPE FITTINGS ACCORDING WITH PVC FITTING LISTED IN TABLE 702.4 F.B.C.  
 G. CONDENSATE DRAINS FROM AIR CONDITIONING UNITS: "PVC"  
 H. DOMESTIC WATER PIPE MATERIAL SHALL CONFORM TO NSF 61 AND SHALL BE 606.5 CONFORM TO THE STANDARDS LISTED TO FPCB TABLES 603.3, 603.4, & 606.5  
 I. ALL CONTROL VALVES FOR DOMESTIC WATER SHALL BE CAST BRASS OR B-88 BRONZE GATE VALVES.  
 J. PROVIDE FITTING PIPE CPVC ACCORDING WITH STANDARD TABLE 603.5.5  
 K. INSPECTIONS AND TESTS  
 A. CONTRACTOR SHALL BE RESPONSIBLE TO ASK FOR INSPECTIONS TO THE AUTHORITIES HAVING JURISDICTION, AS THE WORK PROGRESSES. ALL SYSTEMS SHALL BE TESTED BY CODE AND/OR LOCAL REGULATIONS.  
 B. DRAINAGE PIPING: BEFORE INSTALLATION OF ANY DRAINS, THE ENDS OF SYSTEMS SHALL BE CAPPED AND ALL LINES FILLED WITH THE WATER TO THE HIGHEST POINT AND ALLOWED TO STAND UNTIL INSPECTION IS MADE BY AN OWNER  
 C. PRESSURE WATER LINES WITH A MIXTURE OF TWO (2) POUNDS OF CHLORINATED LIME TO EACH 1,000 GALLONS OF WATER (50 PPM OF AVAILABLE CHLORINE) BEFAY MIXTURE IN PIPES 48 HOURS AND FLUSH THOROUGHLY WITH POTABLE WATER BEFORE THE SYSTEM FITTINGS AND EQUIPMENT SHALL BE GIVEN AN IN-SERVICE TEST AFTER COMPLETION OF THE INSTALLATION.

MARK	DESCRIPTION	FIXTURE	HOT WATER	COLD WATER	TRAP	REMARKS
WC	WATER CLOSET	4	---	1/2"		3" DRAIN TANK TOILET
L	LAVATORY	1	1/2"	1/2"	1 1/4"	
T	TUB	2	1/2"	1/2"	1 1/2"	

- 1) FIXTURES TO COMPLY WITH REFERENCE STANDARDS AS PER FPC 2014 PLUMBING SEC. 406 THROUGH 421.
- 2) RESIDENTIAL FIXTURES SHALL COMPLY WITH 2014 FBC Section P2701.
- 3) ANTI-SCALD VALVE: ALL SHOWERS & BATH/SHOWER COMBINATIONS SHALL BE PROTECTED WITH A CONTROL VALVE OF THE PRESSURE-BALANCE-THERMOSTATIC MIXING OR COMBINATION TYPE SET. HANDLE POSITION STOPS PER MANUFACTURERS INSTRUCTIONS AT TIME OF INSTALLATION TO A MAXIMUM MIXED WATER OUTLET TEMPERATURE OF 110° F.
- 4) ALL DRAINS 3" & OR ABOVE SHOULD HAVE 1/8" SLOPE & BELOW 3" SHOULD HAVE 1/4" SLOPE.
- 5) ICE MAKERS, REFRIGERATORS & DRINKING FOUNTAINS TO BE IN LINE BACKFLOW DEVICE & FILTER.
- 6) DISHWASHING MACHINES SHALL CONFORM TO ASSE 1004 AND NSF3. WATER SUPPLY SHALL BE PROTECTED WITH AN BACKFLOW DEVICE AND PROVIDE INDIRECT WASTE W/AN AIR BREAK.

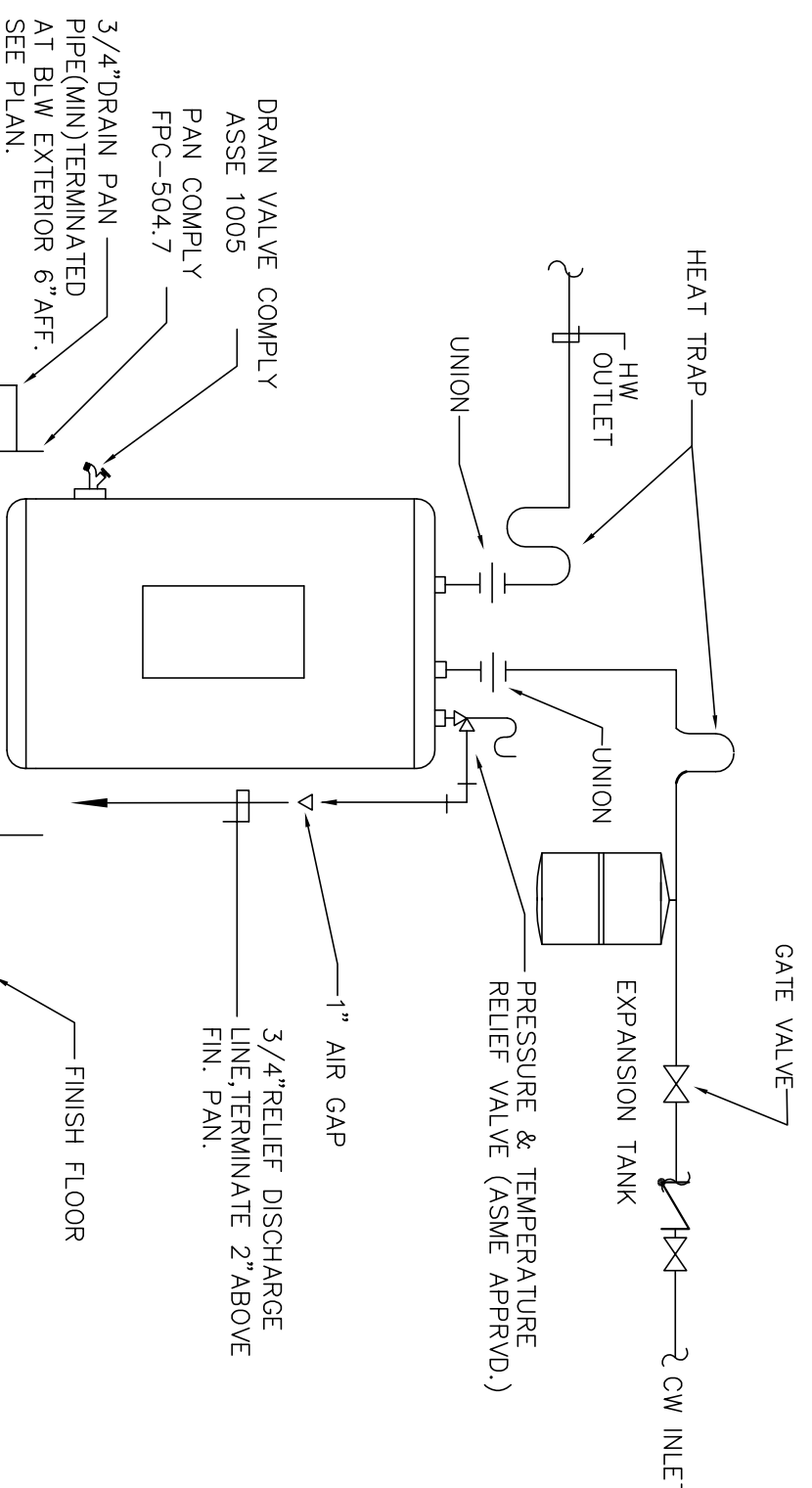


**WALL CLEANOUT DETAIL**  
N.T.S.

---

**WATER HAMMER ARRESTOR**

MANUFACTURER: WATTS  
 FOR COMMERCIAL APPLICATION  
 MODEL: 15M2 OR SIMILAR  
 SIZE: 1/2"  
 MAXIMUM WORKING PRESSURE: 150 PSI  
 MAXIMUM TEMPERATURE: 180 F  
 MAXIMUM SHOCK PRESSURE: 200 PSI



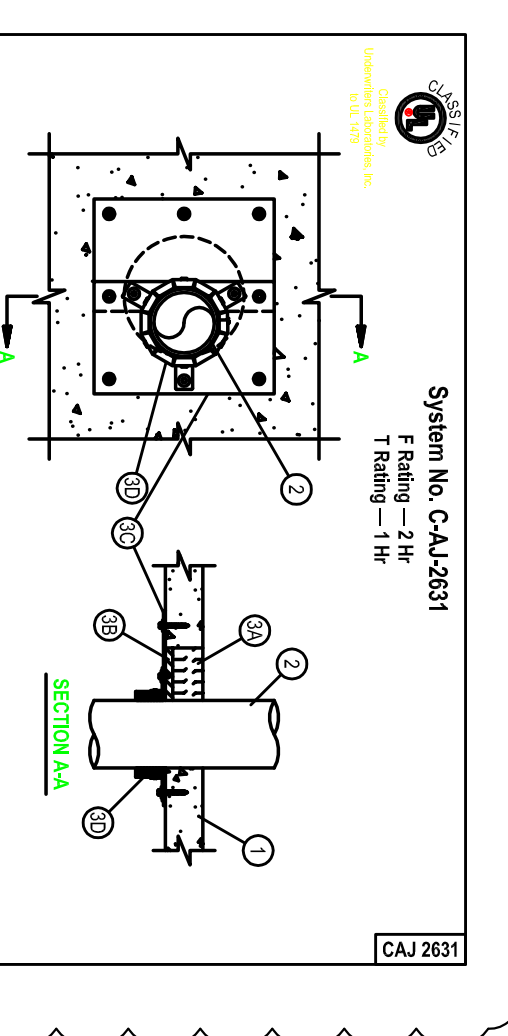
**WATER HEATER SCHEDULE**

NEW WATER HEATER (4)  
 40 GALLONS.  
 MANUFACTURE: AO SMITH  
 MODEL: EN18-40  
 MAX. LENGTH: 40  
 MAX. TEMP: 240 V. 18"  
 DIMENSION: 32" x 23"

**POTABLE WATER EXPANSION TANK**

MODEL: WATTS DET-20M1 OR SIMILAR  
 MAX. PRESSURE: PS\_150  
 MANUFACTURE: PS\_150  
 TANK VOLUME: GAL\_8.5  
 DIA PRE-CHARGE: PSI\_20  
 DIMENSION: 12.5  
 LENGTH: 19.2  
 WEIGHT: 13.0 LBS

TEMPERED WATER SHALL BE DELIVERED TO THE POINTS AND APPROVED TO THE POINTS CONFORMS TO ASSE 1070 OR CSA B125.3. MAXIMUM TEMPERATURE A VALVE WILL BE REJECT IF AT ANY TIME DURING TEMPERATURE VARIATION TIME EXCEEDS 120 F. EACH VALVE MUST HAVE AND TO THE POINT POSITION. ALL HW WATER PIPES (HW & HWR) SHALL BE INSULATED ACCORDING SECTION 607.5. ALL HOT WATER SUPPLY PIPES SHALL BE IN COMPLIANCE WITH SECTION 607. MAXIMUM TEMPERATURE SUPPLY 120°



1. Floor or Wall Assembly - Min 2-1/2 in. (64 mm) thick reinforced lightweight or normal weight concrete (1500 psi) or 4\"/>

2. Through Penetration - One nonmetallic pipe to be installed either concentric or offset from the other. The offset shall be a minimum of 1/4\"/>

3. Penetration System - The penetration system shall consist of the following (a) through (d):  
 A. Penetration Gasket (PG) Pipe - Nom. 4 in. (102 mm) diam (or smaller) Schedule 40 (10#) pipe.  
 B. Gasketed Polyethylene Glycol (GPG) Pipe - Nom. 4 in. (102 mm) diam (or smaller) Schedule 40 (10#) pipe.  
 C. Argon-filled Butadiene Styrene (ABS) Pipe - Nom. 4 in. (102 mm) diam (or smaller) Schedule 40 (10#) pipe.  
 D. Flame Retardant Polypropylene (FRPP) Pipe - Nom. 4 in. (102 mm) diam (or smaller) Schedule 40 (10#) pipe.  
 E. Polyethylene Glycol (PEG) Pipe - Nom. 4 in. (102 mm) diam (or smaller) Schedule 40 (10#) pipe.  
 F. Polyethylene Glycol (PEG) Pipe - Nom. 4 in. (102 mm) diam (or smaller) Schedule 40 (10#) pipe.  
 G. Polyethylene Glycol (PEG) Pipe - Nom. 4 in. (102 mm) diam (or smaller) Schedule 40 (10#) pipe.  
 H. Polyethylene Glycol (PEG) Pipe - Nom. 4 in. (102 mm) diam (or smaller) Schedule 40 (10#) pipe.  
 I. Polyethylene Glycol (PEG) Pipe - Nom. 4 in. (102 mm) diam (or smaller) Schedule 40 (10#) pipe.  
 J. Polyethylene Glycol (PEG) Pipe - Nom. 4 in. (102 mm) diam (or smaller) Schedule 40 (10#) pipe.  
 K. Polyethylene Glycol (PEG) Pipe - Nom. 4 in. (102 mm) diam (or smaller) Schedule 40 (10#) pipe.  
 L. Polyethylene Glycol (PEG) Pipe - Nom. 4 in. (102 mm) diam (or smaller) Schedule 40 (10#) pipe.  
 M. Polyethylene Glycol (PEG) Pipe - Nom. 4 in. (102 mm) diam (or smaller) Schedule 40 (10#) pipe.  
 N. Polyethylene Glycol (PEG) Pipe - Nom. 4 in. (102 mm) diam (or smaller) Schedule 40 (10#) pipe.  
 O. Polyethylene Glycol (PEG) Pipe - Nom. 4 in. (102 mm) diam (or smaller) Schedule 40 (10#) pipe.  
 P. Polyethylene Glycol (PEG) Pipe - Nom. 4 in. (102 mm) diam (or smaller) Schedule 40 (10#) pipe.  
 Q. Polyethylene Glycol (PEG) Pipe - Nom. 4 in. (102 mm) diam (or smaller) Schedule 40 (10#) pipe.  
 R. Polyethylene Glycol (PEG) Pipe - Nom. 4 in. (102 mm) diam (or smaller) Schedule 40 (10#) pipe.  
 S. Polyethylene Glycol (PEG) Pipe - Nom. 4 in. (102 mm) diam (or smaller) Schedule 40 (10#) pipe.  
 T. Polyethylene Glycol (PEG) Pipe - Nom. 4 in. (102 mm) diam (or smaller) Schedule 40 (10#) pipe.  
 U. Polyethylene Glycol (PEG) Pipe - Nom. 4 in. (102 mm) diam (or smaller) Schedule 40 (10#) pipe.  
 V. Polyethylene Glycol (PEG) Pipe - Nom. 4 in. (102 mm) diam (or smaller) Schedule 40 (10#) pipe.  
 W. Polyethylene Glycol (PEG) Pipe - Nom. 4 in. (102 mm) diam (or smaller) Schedule 40 (10#) pipe.  
 X. Polyethylene Glycol (PEG) Pipe - Nom. 4 in. (102 mm) diam (or smaller) Schedule 40 (10#) pipe.  
 Y. Polyethylene Glycol (PEG) Pipe - Nom. 4 in. (102 mm) diam (or smaller) Schedule 40 (10#) pipe.  
 Z. Polyethylene Glycol (PEG) Pipe - Nom. 4 in. (102 mm) diam (or smaller) Schedule 40 (10#) pipe.

**PLUMBING SCHEDULE**  
N.T.S.

1 4

**engineering inc**

2855 Te Deum Road, Suite 1109  
 33594  
 Phone > 305.444.9827

Signature \_\_\_\_\_  
 Date \_\_\_\_\_

JOB # 16-0908  
 Annalis Rodriguez, P.E.  
 License Number 60236  
 CA 5138

CLIENT:  
**701 4th Street**

**Interior Renovations**

701 4th Street  
 Miami Beach, FL 33139  
 Fido: 02-4203-009-3040

**CDS**

333 SE 2ND AVENUE, SUITE 2066  
 MIAMI, FL 33131  
 Tel: 786.218.5335  
 License #AA 26M02467

**WWW.CASTELLANOSDESIGN.COM**

No.	DATE	ISSUED / REVISED
1	02-16-17	ERC
3	05-22-17	ERC
4	06-13-17	ERC

**CASTELLANOS DESIGN**

DESIGNER: CASTELLANOS DESIGN

PROJECT NO.: 2016-17

FLORIDA ARCHITECTURAL LICENSE #66183

MISPLANNING CONTRACTORS  
 FLORIDA ARCHITECTURAL LICENSE #66183

MISPLANNING CONTRACTORS  
 FLORIDA ARCHITECTURAL LICENSE #66183

**PLUMBING SCHEDULE**

16-0908  
 SHEET NO.: **P-3**