

1. GENERAL PROVISION

- 1. SUPPLY AND INSTALL A COMPLETE AND OPERATIONAL SYSTEM AS INDICATED AND/OR SPECIFIED DRAWINGS ARE NOT TO BE SCALED AND ARE INTENDED AS SCHEMATIC ONLY. VISIT SITE PRIOR TO SUBMISSION OF BID AND EXAMINE ALL EXISTING CONDITIONS. NOTIFY ENGINEER OF DISCREPANCIES, CONFLICTS AND AREAS OF CONCERN.
2. ALL WORK SHALL CONFORM TO THE LATEST CODE REQUIREMENTS OF THE ONTARIO BUILDING CODE, FIRE MARSHALS ACT, MUNICIPAL BYLAWS AND AUTHORITIES HAVING JURISDICTION. THE INSTALLATION SHALL BE IN ACCORDANCE TO THE STANDARDS OF THE C.S.A., C.G.A. AND U.L.C. FOLLOW ALL RECOMMENDATIONS OUTLINED BY THE MANUFACTURER. DRAWINGS ARE TO BE READ IN CONJUNCTION WITH THE AFOREMENTIONED CODES AND STANDARDS WITH THE INSTALLATION PERFORMED ONLY BY CONTRACTORS LICENSED AND FAMILIAR WITH THE ABOVE REQUIREMENTS.
3. PAY AND OBTAIN ALL REQUIRED PERMITS, FEES, INSPECTIONS AND LICENSES. SUBMIT DRAWINGS TO AUTHORITIES AS REQUIRED.
4. ALL MATERIALS AND EQUIPMENT TO BE NEW AND FREE FROM DEFECTS. GUARANTEE IN WRITING, INCLUDING THE MANUFACTURER'S WARRANTY, THE MATERIAL AND WORKMANSHIP, FOR A PERIOD OF ONE YEAR AFTER BUILDING ACCEPTANCE BY THE ENGINEER AND THE OWNER.
5. MECHANICAL CONTRACTOR SHALL PROVIDE TO THE OWNER, 5 BOUND SETS OF OPERATING AND MAINTENANCE INSTRUCTIONS FOR ALL MECHANICAL EQUIPMENT..
6. THE MECHANICAL TRADE SHALL SUPPLY ALL ACCESS DOORS AND COVERS FOR INSTALLATION BY GENERAL TRADES FOR CONCEALED VALVES, CLEANOUTS, AIR VENTS, FIRE DAMPERS, BALANCING DAMPERS AND EQUIPMENT, REQUIRING PERIODIC MAINTENANCE OR ADJUSTMENT. OBTAIN APPROVAL FROM THE ARCHITECT AND ENGINEER FOR ALL LOCATIONS AND SIZES.
7. KEEP SITE CLEAN AT ALL TIMES AND PHASE WORK WITH PROJECT CO-ORDINATOR. CLEAN ALL EQUIPMENT, PROVIDE INITIAL MAINTENANCE, START-UP AND FILTER REPLACEMENT PRIOR TO FINAL INSPECTION.
8. SUBMIT SIX(6) COPIES OF SHOP DRAWINGS FOR ALL EQUIPMENT PRIOR TO ORDERING. PROVIDE 3 MAINTENANCE MANUALS C/W APPROVED COPY OF ALL SHOP DRAWINGS, MARKED UP WHITE PRINT SHOWING AS-BUILT RECORD LIST.
9. VISIT AND INSPECT THE SITE. NO ALLOWANCE WILL BE MADE FOR FAILURE TO DO SO.
10. COOPERATE WITH ALL OTHER TRADES. CO-ORDINATE ALL WORK.
11. IDENTIFY ALL EQUIPMENT WITH LAMACOID NAMEPLATES SECURELY FASTENED.
12. MECHANICAL DRAWINGS SHALL BE READ IN CONJUNCTION WITH DRAWINGS, THE MECHANICAL CONTRACTOR SHALL BE DEEMED RESPONSIBLE FOR CO-ORDINATION OF ALL TRADES TO ENSURE AN ORDERLY AND COMPLETE INSTALLATION.
13. ANY WORK NOT SHOWN ON THE DRAWINGS OR SPECIFICALLY MENTIONED IN THE SPECIFICATIONS, BUT CONSIDERED NECESSARY FOR THE COMPLETION OF THE WORK IN THE PROPER MANNER, SHALL BE PROVIDED BY THIS CONTRACTOR AT NO ADDITIONAL CHARGE.
14. NOTHING CONTAINED HEREIN SHALL BE CONSTRUED TO RELIEVE THIS CONTRACTOR FROM MAKING GOOD AND PERFECT IN ALL USUAL DETAILS OF CONSTRUCTION AND HE WILL BE HELD RESPONSIBLE TO PROVIDE AND FURNISH MATERIAL TO DO ALL WORK AND LABOUR, AND BEAR EXPENSES INCIDENTAL TO THE SATISFACTORY COMPLETION OF THE WORK EMBRACED IN THESE SPECIFICATIONS.
15. VERIFY VOLTAGE WITH DIVISION 16 CONTRACTOR ON SITE, FOR ALL EQUIPMENT, BEFORE PLACEMENT OF ORDER.
16. MECHANICAL CONTRACTOR SHALL CONFIRM EXACT LOCATION OF ALL EXISTING MECHANICAL SERVICES & EQUIPMENT.

2. PLUMBING

- 1. PLUMBING AND DRAINAGE SHALL BE INSTALLED IN ACCORDANCE WITH THE ONTARIO BUILDING CODE, PART 7.
2. SUPPORT SUSPENDED PIPING FROM STRUCTURAL MEMBERS WITH CLEVIS HANGERS AT ADEQUATE SPACING TO ENSURE NO SAG OR FAILURE OF JOINTS. DO NOT USE PERFORATED BAND, WIRE CHAIN, OR SOLID RING TYPE HANGERS. ISOLATE COPPER PIPE FROM HANGER OR OTHER PIPING WHERE ELECTROLYTIC ACTION CAN OCCUR. ADEQUATELY BRACE PIPING AND ALLOW FOR EXPANSION OR CONTRACTION. PROVIDE EXPANSION LOOPS OR JOINTS SIZED TO COMPENSATE CHANGES IN PIPE LENGTH CAUSED BY A TEMPERATURE DIFFERENTIAL OF 150°F (65.6 °C). PROVIDE WATER HAMMER ARRESTORS AT ALL FIXTURE GROUPS, PPP-SC SERIES.
3. INSTALL ACCESS COVERS FOR ALL CLEANOUTS. PROVIDE BACKFLOW PREVENTERS AS REQUIRED BY CODE TO PROTECT THE POTABLE WATER SUPPLY.
4. CO-ORDINATE START-UP OF EQUIPMENT WITH OTHER TRADES AND ENSURE THAT ALL WORK AND INSPECTIONS ARE COMPLETE.
5. WATER HAMMER ARRESTOR SHALL BE PROVIDED.
6. CPVC AND PVC CAN BE DAMAGED BY CONTACT WITH CHEMICALS FOUND IN SOME CONSTRUCTION PRODUCTS (AND SITE PREPARATIONS). REASONABLE CARE NEEDS TO BE TAKEN TO INSURE THAT PRODUCTS COMING INTO CONTACT WITH CPVC SYSTEMS ARE CHEMICALLY COMPATIBLE. CONFIRM CHEMICAL COMPATIBILITY WITH CPVC WITH THE MANUFACTURER OF THE PRODUCT IN CONTACT WITH CPVC PIPING SYSTEMS. IF CHEMICAL COMPATIBILITY WITH CPVC IS IN QUESTION, ISOLATE THE SUSPECT PRODUCT FROM CONTACT WITH CPVC PIPE OR FITTINGS.

Table with 3 columns: SERVICE, MATERIAL, LOCATION TO BE USED. Includes rows for DCW & DHW BELOW GROUND, DCW & DHW ABOVE GROUND, SANITARY, STORM & VENT ABOVE GROUND, SANITARY, STORM & VENT ABOVE GROUND, SANITARY, STORM & VENT BELOW GROUND.

- 7. ALL PIPING TO BE TESTED FOR A MINIMUM OF 24 HOURS IN ACCORDANCE TO THE CODE REQUIREMENTS. DO NOT BACKFILL OR CONCEAL ANY PIPE UNTIL TESTED AND SUBSEQUENTLY INSPECTED BY THE ENGINEER.
8. INSULATE ALL HOT AND COLD WATER PIPING WITH 1" (25mm) FLEXIBLE PREFORMED FIBERGLASS PIPE INSULATION WITH VAPOUR BARRIER. TAPE ALL JOINTS. PROVIDE CANVAS FINISH C/W 2 COATS SIZING ON ALL EXPOSED PIPING. ALL WORK TO BE PERFORMED BY INSULATION JOURNEYMEN.
9. CONCEAL ALL PIPING WHERE POSSIBLE. INSTALL CHROME PLATED ESCUTCHEON PLATES IN ALL FINISHED AREAS. PROVIDE UNIONS AND VALVES AT ALL DOMESTIC HOT WATER TANKS AND OTHER EQUIPMENT TO FACILITATE MAINTENANCE.
10. INSTALL A SANITARY VENT SYSTEM TO COMPLY WITH ALL APPLICABLE CODES, AND ALL AUTHORITIES HAVING JURISDICTION.
11. INSTALL ONE PIECE CHROME PLATED ESCUTCHEON PLATES AT ALL EXPOSED PIPE PENETRATIONS THROUGH WALLS, CEILINGS, AND FLOORS.
12. INSTALL PIPE SLEEVES AT ALL PIPE PENETRATIONS THROUGH FLOOR SLABS. MAKE PENETRATIONS WATERTIGHT.

3. NATURAL GAS DISTRIBUTION SYSTEM

- 1. MECHANICAL CONTROL SHALL ARRANGE FOR AND PAY ALL COSTS INVOLVED REGARDING THE INSTALLATION OF THE NATURAL GAS SERVICE.
2. ALL WORK SHALL BE PERFORMED IN STRICT ACCORDANCE TO B149-1.10 - LATEST EDITION OF THE INSTALLATION CODE FOR NATURAL GAS BURNING APPLIANCES AND EQUIPMENT AND THE ONTARIO REGULATION 862-LATEST EDITION OF ENERGY ACT.
3. ALL PIPING SHALL BE SCHEDULE 40 STEEL, WITH SCREWED JOINTS OR WELDED JOINTS AS PERMITTED BY THE APPLICABLE CODES. ALL PIPING TO BE PAINTED BY THIS MECHANICAL CONTRACTOR. MINIMUM TWO COATS OF ALKYD YELLOW PAINT.
4. VALVES: SHALL BE CODE APPROVED.
5. FLEXIBLE PIPING IS ALLOWED ONLY WHEN INDICATED ON THE DRAWINGS.

4. FIRE PROTECTION

- 1. FIRE EXTINGUISHERS:
1. TYPE FE: MULTI-PURPOSE DRY CHEMICAL EXTINGUISHER, STORED PRESSURE, RECHARGEABLE TYPE WITH HOSE AND SHUTT-OFF NOZZLE, ULC LABELED FOR A, B, AND C CLASS PROTECTION. SIZE 4.5 Kg. PROVIDE COMPLETE WITH WALL BRACKET AND MAINTENANCE TAGS.
2. STANDARD OF ACCEPTANCE: WILSON & COUSINS OR CANADIAN FIRE HOSE CORPORATION.
3. INSTALL IN ELECTRICAL/MECHANICAL ROOM AND AT EVERY EXIT DOOR.

5. INSULATION

a) PIPING

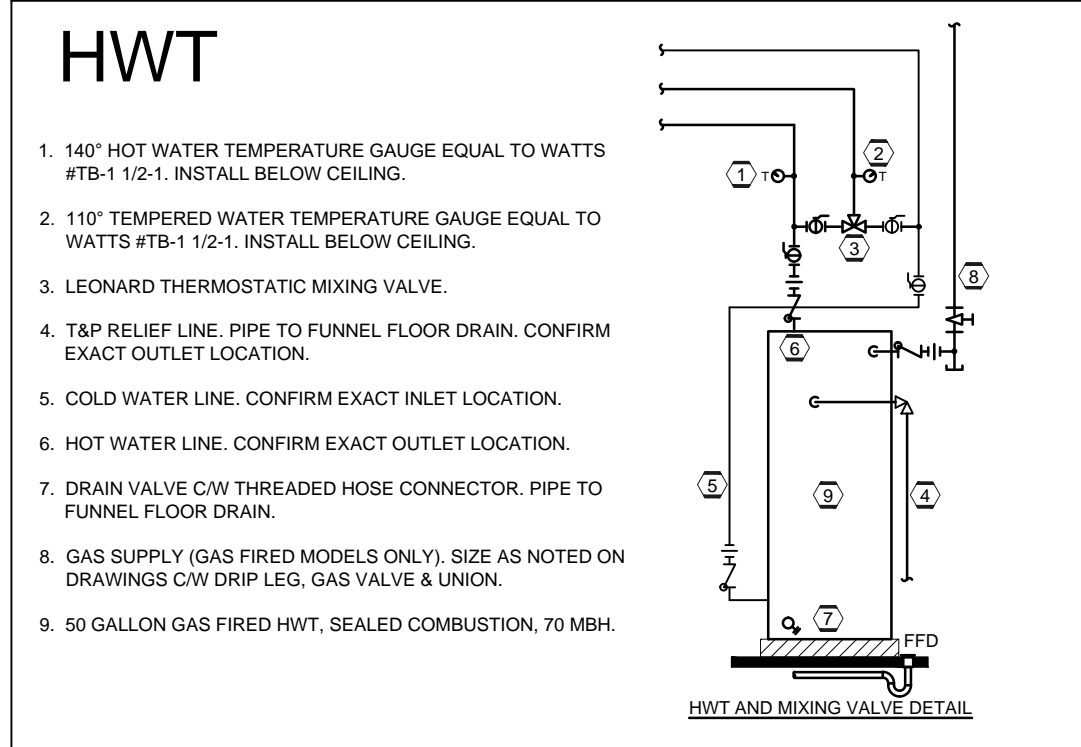
- 1. APPLY THE INSULATION WHEN THE REQUIRED HYDROSTATIC TESTS HAVE BEEN COMPLETED.
2. INSULATION SHALL BE APPLIED TO CLEAN DRY PIPES AND DUCTS, ALL JOINTS BUTTED FIRMLY AND LAPPED WITH 4" WIDE STRIP OF APPROVED ADHESIVE BACKED VAPOUR PROOF TAPE.
3. COVER ALL PIPE FITTINGS USING FABRICATED SECTION FROM THE PIPE COVERING.
4. APPLY AN APPROVED VAPOUR BARRIER OVER ALL PIPES HAVING COLD SURFACES AND ENSURE A SUITABLE SEAL.
5. INSULATION JACKET OR ADHESIVES NOT TO HAVE A FLAME SPREAD RATING OVER 25, SMOKE DEVELOPED, AND FUEL CONTRIBUTED RATING NOT OVER 50, IN ACCORDANCE WITH ULC STANDARDS AND THE ONTARIO FIRE MARSHALL.
6. WORK SHALL BE PERFORMED BY LICENSED JOURNEYMAN.
7. INSULATE ALL DOMESTIC HOT WATER SUPPLY AND RETURN AND HEATING SUPPLY AND RETURN LINES WITH 1" (25MM) FIBREGLASS PIPE INSULATION. INSULATE COLD OR CHILLED WATER PIPES WITH 1" (25MM) PREFORMED FIBREGLASS INSULATION WITH VAPOUR BARRIER. NO INSULATION IS REQUIRED ON DOMESTIC HOT OR COLD WATER EXPOSED IN SITES.

MECHANICAL (PIPING) CONTRACTOR SHALL PROVIDE THE FOLLOWING: (PROVIDE MEANS; SUPPLY & INSTALL UNLESS SPECIFICALLY NOTED OTHERWISE).

PROVIDE:

- 1. MECHANICAL (PIPING) COORDINATION AND INTERFERENCE DRAWING.
2. ALL NECESSARY SLEEVING FOR PIPING
3. MECHANICAL (PIPING) COMMISSIONING, AS BUILT DRAWINGS AND OPERATION AND MAINTENANCE DRAWINGS AS SPECIFIED.
4. COMPLY WITH CODES AS SPECIFIED
5. HANGERS AND SUPPORTS FOR PLUMBING, PIPING.
6. TRADE CLEAN UP -- SEE OCA RECOMMENDED DAY TO DAY CLEAN UP STANDARD OF PRACTICE.
7. PROTECTION OF OTHER TRADES' WORK FROM DAMAGE BY THIS TRADE.
8. HOISTING FOR MECHANICAL (PIPING) MATERIALS AND EQUIPMENT.
9. ARRANGE INSPECTION FOR PLUMBING WORK.
10. SCAFFOLDING AS REQUIRED FOR MECHANICAL (PIPING) WORK.
11. DESIGN, SUPPLY AND INSTALLATION OF VIBRATION ISOLATION AND SEISMIC RESTRAINT FOR MECHANICAL SYSTEMS.
12. IDENTIFICATION.
13. ALL STEEL BASES AND STEEL SUPPORTS FOR MECHANICAL (PIPING) EQUIPMENT WHEN SPECIFIED OR DETAILED ONLY ON MECHANICAL.
14. SUPPLY ACCESS DOOR(S) WHEN REQUIRED BY MECHANICAL (PIPING).
15. FIRE-STOPPING FOR MECHANICAL (PIPING) SYSTEMS.
16. MECHANICAL (PIPING) PERMITS AND INSPECTION FEES WHEN AND WHERE REQUIRED.
17. MECHANICAL (PIPING) CONNECTIONS TO SPECIALTY EQUIPMENT WHICH IS SUPPLIED AND INSTALLED BY OTHERS.
18. CAST IRON CATCH BASIN AND MANHOLE COVERS, TRENCH GRATINGS, SUMP FRAMES AND COVERS
19. PREFAB SHOWER CABINETS OR SURROUNDS COMPLETE WITH MANUFACTURED BASES.
20. MANUFACTURED SUMP'S, PITS AND COVERS COMPLETE WITH PUMPS INSIDE BUILDING WALLS.
21. ALL PLUMBING SYSTEMS.
22. NATURAL GAS PIPING SYSTEMS WITHIN BUILDINGS.
23. ALL HOT WATER HEATERS AND STORAGE TANKS.
24. ALL HEAT EXCHANGERS AND CONVERTERS.
25. MECHANICAL INSULATION FOR PIPING.

MECHANICAL LEGEND table with symbols and descriptions for Domestic Cold Water, Domestic Hot Water, Water Main Service (Under Ground), Gas Line, Storm Line, Rain Water Leader, Sanitary Vent, Sanitary Line, Gate Valve, Plug Valve, Non Freeze Hydrant, Water Meter, Remote Water Meter, Recirculating Pump, Floor Drain, Fire Extinguisher, Roof Drain.



GENERAL NOTES:

- 1. CONTRACTOR TO PROVIDE FIRE STOP AT ALL PENETRATION IN FIRE RATED WALLS, CEILING, & FLOOR.
2. PROVIDE FIRE EXTINGUISHERS AS PER REQUIREMENT OF THE CODE & FIRE MARSHALL.

PLUMBING FIXTURES SHALL BE PROVIDED AS INDICATED

TOILET - FLOOR MOUNTED PRESSURE-ASSIST TANK

American Standard CADET ELONGATED# 2333.100 Pressure-Assist Low Consumption Tank Toilet, floor mounted, vitreous china, elongated syphon jet flush action bowl, fully glazed 2" (50mm) ball pass internal trapway, 10" x 12" (254mm x 304mm) large water surface, "Spaced Connect" P.A. tank complete, 1.3 gal. (6L) flush, with cast sanitary guard on bowl for china to china tank assembly, bolt caps. Provide floor flange, flange bolts and gasket. Centoco #5005TSCC Seat, elongated heavy duty solid plastic open front less cover, with reinforced stainless steel check hinge, posts, washers and nuts for public use and #820STS open front with cover for private use. McGuire #H172BV Supply, C.P., polished, rigid horizontal integral sweat tube with V.P. combination wheel handle/loose key ball valve angle stop, escutcheon and flexible riser.

TOILET - FLOOR MOUNTED PRESSURE-ASSIST TANK (BARRIER FREE DESIGN)

American Standard CADET ELONGATED 16-1/2" (420mm) HIGH# 2377.100 Pressure-Assist Low Consumption Tank Toilet, floor mounted, vitreous china, elongated syphon jet flush action bowl, fully glazed 2" (50mm) ball pass internal trapway, 10" x 12" (254mm x 304mm) large water surface, "Spaced Connect" P.A. tank complete, 1.3 gal. (6L) flush, with cast sanitary guard on bowl for china to china tank assembly, bolt caps. Provide floor flange, flange bolts, and gasket. Centoco #820STS Seat, elongated heavy duty solid plastic open front with cover, reinforced stainless steel check hinge, posts, washers and nuts. McGuire #H172BV Supply, C.P., polished, rigid horizontal integral sweat tube with V.P. combination wheel handle/loose key ball valve angle stop, escutcheon and flexible riser.

BASIN - WALL HUNG (BARRIER FREE DESIGN & GENERAL USE) FOR TIGHT SPACE AREAS

American Standard MURRO# 0954.000 Basin, 4" (102mm) centres, 22" x 21" x 5 - 7/12" (559mm x 533mm x 127-191mm) deep, wall hung, vitreous china, rear overflow, for concealed arm support. Chicago Faucets #802-V-XK Faucet, C.P. 4" (102mm) C.C., solid cast brass lead-free body, 1/4 turn ceramic disc valve cartridges, with vandal-resistant 1.84 GPM (8L) flow aerator outlet and cast brass lever handles. McGuire #155A Drain, C.P. open grid. McGuire #H170VRB Supplies, C.P., polished, short horizontal integral sweat tubes with V.P. combination wheel handle/loose key ball valve angle stops, escutcheons and braided flexible risers. McGuire #8872C-17T p' Trap, C.P. 17 gauge (1.5mm), 1-1/4" (32mm) and escutcheon. Smith Series #0700-M Carrier, with steel pipe legs, block base feet support, concealed arms and pedestal plate. (For narrow wall installation provide 2" type sleeve for arms.) American Standard #0059.020 Semi-China Pedestal to cover exposed piping as per local codes.

BASIN - COUNTER MOUNTED (BARRIER FREE DESIGN)

American Standard CADET UNIVERSAL ACCESS# #949.001 Basin, 4" (102mm) centres, 21" x 17-1/2" x 5-1/4 - 6-7/8" (533mm x 445mm x 133-175mm) deep, counter mounted, vitreous china, rear overflow, self-rimming with sealant. Chicago Faucets #802-V-317-XK Faucet, C.P. 4" (102mm) C.C., solid cast brass lead-free body, 1/4 turn ceramic disc valve cartridges, with vandal-resistant 1.84 GPM (8L) flow aerator outlet and cast brass 4" (102mm) blade handles. McGuire #155W Drain, C.P. offset open grid. McGuire #H170VRB Supplies, C.P., polished, short rigid horizontal integral sweat tubes with V.P. combination wheel handle/loose key ball valve angle stops, escutcheons and braided flexible risers. McGuire #8872C-17T p' Trap, C.P. 17 gauge (1.5mm), 1-1/4" (32mm) and escutcheon. ATS Spec #BF-1 Sanitary Safte-Covers to exposed piping as per local codes.

TWO COMPARTMENT S.S. SINK

S.S. Sink, 18-7/16" x 31-1/4" x 7" (468mm x 794mm x 178mm) deep, counter mounted, grade 18-8 type 302 stainless steel, double compartment, no back ledge, mirror finished rim, satin finished bowl, with spillway, self-rimming, with crumb cup strainers and sound deadening. Faucet, C.P. 8" (203mm) C.C., deck mounted, lead free cast brass waterways body, metal deck plate, ceramic disc valve cartridges, brass swing spout with 1.84 GPM (8L) flow aerator outlet and metal lever handles. Supplies with angle stops, escutcheons, and flexible metal risers. Cast Brass p' Trap, 1-1/2" (38mm) with cleanout, unions and escutcheon.

SHOWER STALL - ONE PIECE (ACRYLIC) 80" (1519MM)

Bath Shower Stall, 36" x 36" x 87" (915mm x 915mm x 2210mm) high, one piece, (right hand, or left hand, built-in as required), high gloss acrylic, built_in lumbar support, full textured bottom, towel bar, soap dish, shampoo dish, fiberglass reinforced backing. Sliding Shower Door Enclosure with obscure tempered safety glass complete. Bath and Shower Valve, C.P. pressure balancing controller, solid cast brass body, washerless, ceramic drip-free disc valve cartridge, maximum temperature limit stop, volume control, service stops, brass escutcheon plate and single control metal lever handles, 2.1 GPM (8.6L) flow, adjustable shower head, arm and flange and solid cast brass diverging tub spout. Bath Drain, C.P., cast brass, 1-1/2" (38mm) with mechanical pop-up. Cast Brass p' Trap, 1-1/2" (38mm).

LAUNDRY TUB SINK - MOUNTED ON STAND (LAUNDRY/UTILITY)

LAUNDRY TUB, 2 hole, 4" (102mm) centres, 21-1/2" x 23" x 13-7/16" (549mm x 584mm x 341mm) deep, mounted on stand, molded stone / plastic, single bow as shown on drawings, waste plug with rubber stopper and tailpiece. Laundry Faucet, C.P. 4" (102mm) C.C., deck mounted, solid cast brass lead-free body, 1/4 turn ceramic disc valve cartridges, swing spout with 1.84 GPM (8L) flow hose end outlet and cast metal handles. C.P. Supplies with angle stops, escutcheons, and flexible metal risers. Cast Brass p' Trap, 1-1/2" (38mm) with cleanout, union and escutcheon.

FLOOR DRAINS - FIN. AREAS - SHOWERS (MED. DUTY STRAINER)

Smith Series 2005A Floor Drain, all duco coated cast iron body, reversible flashing clamp with seepage openings and adjustable 5" (127mm) diameter nickel bronze 1/4" (6.35mm) thick strainer, secured with S.S. screws, 4" (100mm) throat on strainer. In quarry or mosaic tiled areas, provide B - 5" x 5" (127mm x 127mm) square nickel bronze strainer. (Where required by local code provide trap primer connection P.)

FLOOR DRAINS - FIN. AREAS (MED. DUTY STRAINER)

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FLOOR DRAINS WITH COMBINATION FUNNEL - MECHANICAL ROOMS & UNFINISHED AREAS

Smith Series 2320-3591 Funnel Floor Drain, all duco coated cast iron body, flashing clamp with seepage openings and adjustable 8-1/2" (216mm) diameter C.I. grate with 4" x 9" (101.6mm x 228.6mm) oval funnel. Floating floors provide 9340-WSH-3591, with movement compensator and vibration isolator. (If seepage holes not required, remove suffix "WSH" from model number.) (Where required by local code provide trap primer connection P.)

TRENCH DRAIN TD

ACO DRAIN KlassiDrain - S100K, Galvanized steel edge rail channel system, c/w HEAVY DUTY LOAD CLASS "F" grate and Installation Devices. Provide trap primer connection.

NON-FREEZE WALL HYDRANT - EXTERIOR

Smith Series 5609QT Wall Hydrant, 1/4 turn non-drip, ceramic cartridge, 3/4" (19mm) non-freeze wall type with bronze face, adjustable wall-flange operating key and self-draining integral vacuum breaker. Length to suit wall thickness.

HOSE BIB - INTERIOR WASHDOWN

Acorn NEPTUNE #8121CR Hose Valve, C.P. heavy duty rough cast brass body with integral cast flange, vandal-resistant lock shield bonnet with removable wheel handle, 3/4" (19mm) NPT female inlet and hose end vacuum breaker.

OIL INTERCEPTOR

Specifications

General:

The oil water separator shall be ACO Oleopator P NS3/950 complete with ductile iron cover as manufactured by ACO Polymer Products, Inc.

Materials:

The separator body shall be manufactured from medium density polyethylene (MDPE) and have minimum properties as follows:

- 1. Tensile impact strength: 152 ft-lb/in2
2. Tensile strength, ultimate: 3,480 psi
3. Water absorption 0.01%

Frost proof, salt proof and fuels and oils resistant:

The oil separator shall be equipped with a coalescing unit and automatic shut-off valve for situations when maximum oil capacity is reached. Minimum oil storage capacity shall be 240 Liters (64 gal); minimum suspended solids storage capacity shall be 950 Liters (251 gal). Separator shall be resistant to uplift forces from underground water up to finished grade water table level. The oil separator should not require a concrete surround.

Performance:

The effluent water should contain maximum 5mg/L (5ppm) for maximum designed flow. Independent performance testing should be available on request.

Cover

Cover shall be manufactured from ductile iron to ASTM A 536-84 - Grade 65-45-12 and have a minimum inside opening diameter of 600mm (24in). The cover should be marked 'Separator' on the top. The cover shall be capable of withstanding pedestrian / heavy vehicle traffic". (Distance from finished grade to inlet pipe invert (T) shall be ... mm (. . . ft). (see tables for values).

Accessories:

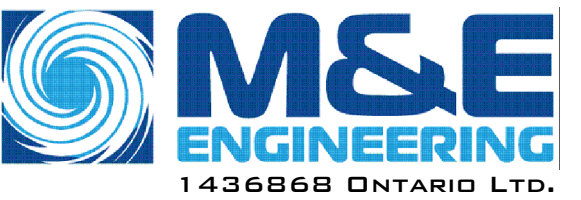
The separator shall be equipped with high liquid level alarm / maximum oil capacity alarm / maximum suspended solids capacity alarm** systems.

Installation:

Separator shall be installed in strict accordance with the manufacturer's installation instructions and recommendations.

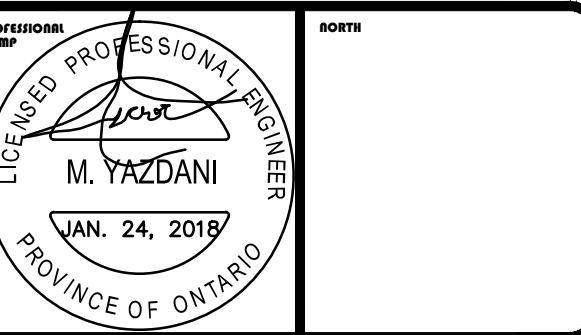


Table with 4 columns: NO., DATE, REVISION, NAME. Includes entries for FEB. 28, 2018 PRICING and JAN. 24, 2018 BUILDING PERMIT.



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EQUIPMENT REPAIR GARAGE
2688 CARP ROD, OTTAWA, ON

PLUMBING SPECIFICATIONS

Table with 2 columns: CHECKED BY, DESIGNED BY, DRAWN BY, DATE, REVISION, DRAWING NUMBER. Includes entries for MY, SY, and M-4.