

SANITARY WASTE AND VENT PIPING – PLASTIC

- 1. **PIPING AND FITTINGS**
 - .1 FOR BURIED AND ABOVE GROUND DWV PIPING TO:
 - .1 CAN/CSA B1800.
- 2. **JOINTS**
 - .1 SOLVENT WELD FOR PVC: TO ASTM D2564.
- 3. **APPLICATION**
 - .1 MANUFACTURER'S INSTRUCTIONS: COMPLY WITH MANUFACTURER'S WRITTEN RECOMMENDATIONS, INCLUDING PRODUCT TECHNICAL BULLETINS, HANDLING, STORAGE AND INSTALLATION INSTRUCTION AND DATASHEETS.
- 4. **INSTALLATION**
 - .1 INSTALL IN ACCORDANCE WITH MANITOBA PLUMBING CODE.
- 5. **TESTING**
 - .1 PRESSURE TEST BURIED SYSTEMS BEFORE BACKFILLING.
 - .2 HYDRAULICALLY TEST TO VERIFY GRADES AND FREEDON FROM OBSTRUCTIONS.
- 6. **PERFORMANCE VERIFICATION**
 - .1 CLEANOUTS:
 - .1 ENSURE ACCESSIBLE AND THAT ACCESS DOORS ARE CORRECTLY LOCATED.
 - .2 OPEN, COVER WITH LINSEED OIL AND RE-SEAL.
 - .3 VERIFY THAT CLEAN-OUT RODS CAN PROBE AS FAR AS THE NEXT CLEANOUT, AS A MINIMUM DISTANCE.
 - .2 TEST TO ENSURE TRAPS ARE FULLY AND PERMANENTLY PRIMED.
 - .3 STORM WATER DRAINAGE:
 - .1 VERIFY DOWNS ARE SECURE.
 - .2 ENSURE WEIRS ARE CORRECTLY SIZED AND INSTALLED.
 - .3 VERIFY PROVISIONS FOR MOVEMENT OF ROOT SYSTEM.
 - .4 ENSURE FIXTURES ARE PROPERLY ANCHORED, CONNECTED TO SYSTEM AND EFFECTIVELY VENTED.
 - .5 AFFIX APPLICABLE LABEL (STORM, SANITARY, VENT, PUMP DISCHARGE) C/W DIRECTIONAL ARROWS EVERY FLOOR OR 4.5 METERS (WHICHEVER IS LESS).

COMMERCIAL WASHROOM FIXTURES

- 1. **MANUFACTURED UNITS**
 - .1 FIXTURES: MANUFACTURE IN ACCORDANCE WITH CAN/CSA-B45 SERIES.
 - .2 TRIM, FITTINGS: MANUFACTURE IN ACCORDANCE WITH CAN/CSA-B125.3.
 - .3 EXPOSED PLUMBING BRASS TO BE CHROME-PLATED.
 - .4 NUMBER, LOCATIONS: AS INDICATED.
 - .5 FIXTURES IN ANY ONE LOCATION TO BE PRODUCT OF ONE MANUFACTURER AND OF SAME TYPE.
 - .6 TRIM IN ANY ONE LOCATION TO BE PRODUCT OF ONE MANUFACTURER AND OF SAME TYPE.
- 2. **APPLICATION**
 - .1 MANUFACTURER'S INSTRUCTIONS: COMPLY WITH MANUFACTURER'S WRITTEN RECOMMENDATIONS, INCLUDING PRODUCT TECHNICAL BULLETINS, HANDLING, STORAGE AND INSTALLATION INSTRUCTION AND DATASHEETS.
- 3. **INSTALLATION**
 - .1 MOUNTING HEIGHTS:
 - .1 STANDARD: TO MANUFACTURER'S RECOMMENDATIONS.
 - .2 WALL-HUNG FIXTURES: AS INDICATED.
 - .3 BARRIER FREE: TO MOST STRINGENT STANDARD (MANITOBA BUILDING CODE, CAN/CSA B651).
- 4. **ADJUSTING**
 - .1 ADJUSTMENTS:
 - .1 ADJUST WATER FLOW RATE TO DESIGN FLOW RATES.
 - .2 ADJUST PRESSURE TO FIXTURES TO ENSURE NO SPLASHING AT MAXIMUM PRESSURES.
 - .3 ADJUST FLUSH VALVES TO SUIT ACTUAL SITE CONDITIONS.
 - .2 CHECKS:
 - .1 WATER CLOSETS: FLUSHING ACTION.
 - .2 AERATORS: OPERATION, CLEANLINESS.
 - .3 VACUUM BREAKERS, BACKFLOW PREVENTERS: OPERATION UNDER ALL CONDITIONS.
 - .3 THERMOSTATIC CONTROLS:
 - .1 VERIFY TEMPERATURE SETTINGS, OPERATION OF CONTROL, LIMIT AND SAFETY CONTROLS.

HEATING, VENTILATION & AIR CONDITIONING

- 1. PROVIDE SUPPLY AIR, RETURN AIR, AND EXHAUST AIR DUCT SYSTEMS AS SHOWN.
- 2. ALL DUCTWORK INSTALLATION SHALL BE PERFORMED IN ACCORDANCE WITH SMACNA LATEST EDITION DUCT STANDARDS.
- 3. THIS SUB CONTRACTOR SHALL SUPPLY AND INSTALL ALL DUCTWORK INCLUDING APPURTENANCES, HANGERS, DAMPERS, ETC.
 - 3.1 RECTANGULAR DUCTWORK SHALL BE CONSTRUCTED FROM GALVANIZED SHEET METAL OF THE FOLLOWING U.S. STANDARD GAUGES:
 - DUCTS UP TO 12" [305mm] ON LONGEST DIMENSION..... 26 GA.
 - DUCTS 13" [330mm] TO 28" [705mm] ON LONGEST DIMENSION..... 24 GA.
 - DUCTS 29" [730mm] TO 48" [1220mm] ON LONGEST DIMENSION..... 22 GA.

TESTING AND BALANCING OF MECHANICAL SYSTEMS

- 1. INDEPENDENT RECOGNIZED AIR BALANCE CONTRACTOR SHALL BE AABC CERTIFIED.
- 2. TEST AND BALANCE BUILDING EXHAUST TO WITHIN 5% OF DESIGN.