



PUBLIC HEALTH ENGINEERING

FUNDAMENTALS OF PLUMBING SYSTEM

INTRODUCTION

DEFINITIONS

CONCEPTS

- FIXTURES, FAUCETS & FIXTURE FITTINGS

WASH BASIN, WATER CLOSET, BIDET, BATH TUB, SHOWER,
URINALS,

KITCHEN SINK, FLOOR DRAIN

- SANITARY ORIENTATION
- REQUIREMENTS OF WATER SUPPLY SYSTEM
- WATER DEMAND CALCULATIONS
- WATER STORAGE & PLUMBING CALCULATIONS
- EXTERNAL & INTERNAL WATER SUPPLY SYSTEM

COLD WATER SUPPLY WATER FLOW SYSTEM

HOT WATER SUPPLY FLOW SYSTEM

HOT WATER RETURN FLOW SYSTEM

- WATER SUPPLY SCHEMATIC LAYOUT
- WATER SUPPLY PIPE SIZING CALCULATIONS
 - SIZING OF COLD WATER SUPPLY PIPING NETWORK
 - SIZING OF HOT WATER SUPPLY PIPING NETWORK
 - SIZING OF HOT WATER RETURN PIPING NETWORK
- RING MAIN SYSTEM
- DESIGN OF SANITARY DRAINAGE & VENTING SYSTEM
- REQUIREMENTS OF SANITARY DRAINAGE SYSTEM
- TYPES OF SANITARY DRAINAGE SYSTEMS

TWO PIPE SYSTEM

ONE PIPE SYSTEM

VENT PIPE SYSTEM

EXTERNAL SANITARY DRAINAGE SYSTEM

INTERNAL SANITARY DRAINAGE SYSTEM

- SANITARY DRAINAGE SCHEMATIC LAYOUT
- SANITARY DRAINAGE PIPE SIZING CALCULATIONS
- DESIGN OF STORM WATER DRAINAGE SYSTEM
- MANHOLE & SOCK PIT DESIGN
- INTRODUCTION TO THE DESIGN OF SPECIALIZED PHE & INDUSTRIAL SYSTEMS
- DESIGN OF WATER TREATMENT PLANTS
- DESIGN OF SEWAGE TREATMENT PLANTS
- DESIGN OF SWIMMING POOLS & FOUNTAINS
- DESIGN OF RAINWATER HARVESTING SYSTEM
- DESIGN OF IRRIGATION PIPING SYSTEM
- DESIGN OF DOMESTIC GAS SUPPLY SYSTEM

PLUMBING DRAWINGS

- TYPICAL FLOOR PLAN- PLUMBING LAYOUT
- TOILET PLAN & ELEVATIONS
- ENLARGED TOILET- PLUMBING LAYOUT
- TOILET FIXTURES MOUNTING DETAILS
- ENLARGED KITCHEN & UTILITY- PLUMBING LAYOUT
- WATER SUPPLY, DRAINAGE & RWP – SCHEMATIC