

CONTENTS

1. Historical development of plumbing engineering	1
2. Systems materials and fixtures for occupancies	37
3. Fixtures , fixture traps and intercepting devices	53
4. Water supply systems	81
5. Flow in water supply piping	123
6. Sizing the water supply systems	150
7. Hot water supply systems	231
8. Drainage and vent systems	283
9. Flow of water in drainage piping	355
10. Sizing drainage systems	365
11. Flow of air in vent piping	377
12. Sizing vent piping	393
Index	405