



ICTAD Specifications for Works

Specifications are intended to ensure that the users essential requirements of performance, quality etc. are met. It spells out and recommend standards of materials and methods, procedures, workmanship, tests, good practices etc. to complete the works in required quality and standard.

The first editions of ICTAD Specifications for Works were published in early 1980s' to the Construction Industry, to fill the vaccum of non-availability of general specifications. The preparation of Specifications of Works were done by a National Steering Committee and the project was funded by the International Development Agency (IDA) of the World Bank.

A major revision to the ICTAD Specifications were initiated in 1996 with the assistance of the IDA of the World Bank to cater for the recent developments in the Construction Industry. As a result, ICTAD appointed a Steering Committee consisting nominees of Professional Organizations in the Construction Industry, Line Ministry and Ministry of Finance. The revision was completed in 2004 and 08 Specifications were revised.

The list of ICTAD Specifications for Works is given below. These document can be purchased from the "Information Centre" of ICTAD at any working day during normal office hours.

Address: Institute for Construction Training and Development
"Savsiripaya", 123, Wijerama Mawatha, Colombo 07.
Tel. : 011-2686089, 2686092, 2686236, 2695965, 2699801
Fax No : 011-2699738
Email : ictad@sltnet.lk

| Ref. No | Name of the Specification | Price with VAT (Rs) |
|--------------|---|---------------------|
| SCA/3/1 | Specifications for Irrigation and Land Drainage Works [2 nd edition (revised) - November 1999] | 630.00 |
| SCA/3/2 | Specifications for Water Supply, Sewerage and Storm Water Drainage Works [2 nd edition (revised) - April 2002] | 1500.00 |
| SCA/3/3 | Specifications for Reclamation Works [2 nd edition (revised) - December 1999] | 650.00 |
| SCA/3/4 | Specifications for Ground Water Exploration & Exploitation [2 nd edition (revised) - May 1999] | 325.00 |
| SCA/4/I | Specifications for Building Works (Vol. I) [3 rd edition (revised) - July 2004] | 1800.00 |
| SCA/4/II | Specifications for Building Works (Vol. II) [2 nd edition (Revised) - October 2001] | 975.00 |
| SCA/5 | Standard Specifications for Construction and Maintenance of Roads and Bridges (1 st edition - 1989) | 2340.00 |
| SCA/6 | Specifications for Coastal & Harbour Engineering Works [2 nd edition (revised) - February 2003] | 650.00 |
| SCA/8 | Specifications for Electrical and Mechanical Works Associated with Building and Civil Engineering [2 nd edition (revised) - August 2000] | 640.00 |
| ICTAD/DEV/16 | Specifications for Board & Cast In-Situ Reinforced Concrete Piles (1 st edition - April 1997) | 195.00 |
| ICTAD/DEV/17 | Specifications for Site Investigation for Building Works & Sample Bill of Quantities (1 st edition - April 1997) | 195.00 |

The content pages of above Specifications are enclosed in the Annexure.

SPECIFICATIONS FOR IRRIGATION & LAND DRAINAGE WORKS (SCA/3/1)

CONTENTS

| | | |
|------------|---|---|
| CHAPTER 1 | - | CLEARING, GRUBBING AND LAND LEVELLING |
| CHAPTER 2 | - | DEALING WITH WATER |
| CHAPTER 3 | - | EXCAVATIONS |
| CHAPTER 4 | - | MATERIALS |
| CHAPTER 5 | - | EARTH EMBANKMENT |
| CHAPTER 6 | - | ROCKFILL EMBANKMENT |
| CHAPTER 7 | - | ROADS |
| CHAPTER 8 | - | DRILLING AND GROUTING |
| CHAPTER 9 | - | REINFORCEMENTS AND DOWELS |
| CHAPTER 10 | - | CONCRETE |
| CHAPTER 11 | - | RUBBLE MASONRY |
| CHAPTER 12 | - | LIGHT DUTY GATES AND HOISTS |
| CHAPTER 13 | - | MISCELLANEOUS |
| CHAPTER 14 | - | SHOTCRETE AND ANCHORS |
| CHAPTER 15 | - | REPAIRS AND MODIFICATIONS TO EXISTING CANAL STRUCTURES AND OTHER RELATED ITEMS |
| CHAPTER 16 | - | GABION CONSTRUCTIONS |

SPECIFICATIONS FOR WATER SUPPLY, SEWERAGE AND STORM WATER DRAINAGE WORKS (SCA/3/2)

CONTENTS

| | | |
|------------|---|--|
| CHAPTER 1 | - | GENERAL REQUIREMENTS |
| CHAPTER 2 | - | EARTHWORKS, TRENCHING AND PILING |
| CHAPTER 3 | - | CONCRETE WORKS |
| CHAPTER 4 | - | PIPES AND FITTINGS |
| CHAPTER 5 | - | PIPELINE INSTALLATION, TESTING AND DISINFECTION |
| CHAPTER 6 | - | MATERIALS FOR SANITARY SEWERS AND SEWAGE PRESSURE MAINS |
| CHAPTER 7 | - | METALS |
| CHAPTER 8 | - | PAINTING AND PROTECTIVE COATINGS |
| CHAPTER 9 | - | BUILDING TRADES |
| CHAPTER 10 | - | ELECTRICAL WORKS FOR BUILDING SERVICES |
| CHAPTER 11 | - | TREATMENT PLANT |
| CHAPTER 12 | - | SUPPLY AND INSTALLATION OF SUBMERSIBLE TYPE PUMPING SETS AND ACCESSORIES |
| CHAPTER 13 | - | SPECIFICATION FOR DIESEL ENGINE DRIVEN DIAPHRAGM TYPE (PORTABLE) DEWATERING PUMPS |
| CHAPTER 14 | - | SPECIFICATION FOR THE AIR BLOWERS AND ACCESSORIES |
| CHAPTER 15 | - | GENERAL SPECIFICATIONS FOR AERATORS |
| CHAPTER 16 | - | GENERAL SPECIFICATION FOR COMMUNUTOR / BAR SCREEN |
| CHAPTER 17 | - | SUPPLY AND INSTALLATION OF UV DISINFECTION SYSTEM |
| CHAPTER 18 | - | SPECIFICATION FOR AIR PUMPS AND ACCESSORIES |
| | | ABBREVIATIONS |

SPECIFICATIONS FOR RECLAMATION WORKS (SCA/3/3)

CONTENTS

| | | |
|------------|---|---|
| CHAPTER 1 | - | CLEARING AND GRUBBING |
| CHAPTER 2 | - | DEWATERING AND TEMPORARY PROTECTIVE WORKS |
| CHAPTER 3 | - | EXCAVATION |
| CHAPTER 4 | - | EXCAVATION OF CANALS AND DRAINS |
| CHAPTER 5 | - | EXPLOSIVES AND BLASTING |
| CHAPTER 6 | - | BORROW AREAS AND QUARRIES |
| CHAPTER 7 | - | EARTH EMBANKMENT |
| CHAPTER 8 | - | ROADS |
| CHAPTER 9 | - | PILING |
| CHAPTER 10 | - | RUBBLE MASONRY |
| CHAPTER 11 | - | LAND RECLAMATION AND DREDGING |
| CHAPTER 12 | - | CANAL BED AND EMBANKMENT PROTECTION |

SPECIFICATIONS FOR GROUND WATER EXPLORATION AND EXPLOITATION (SCA/3/4)

CONTENTS

| | | |
|------------|----------|---|
| CHAPTER 1 | - | GENERAL |
| CHAPTER 2 | - | INVESTIGATIONS |
| CHAPTER 3 | - | WELL DESIGN AND CONSTRUCTION |
| CHAPTER 4 | - | PUMPING TESTS ON WELLS |
| CHAPTER 5 | - | MAINTENANCE OF WELLS EQUIPMENT AND GROUND WATER SOURCES |
| APPENDICES | | |
| | Appendix | A - Dug Well Survey/Field Record Form |
| | Appendix | B - Geophysical Investigations |
| | Appendix | C - Geophysical Logging |
| | Appendix | D - Lithological Record |
| | Appendix | E - Chemical Test Report |
| | Appendix | F - Bacteriological Test Report |
| | Appendix | G - Borehole Completion Record |
| | Appendix | H - Borehole Location Record |
| | Appendix | I - Drill Log |
| | Appendix | J - Measurement of Discharge] |
| | Appendix | K - Pumping Test Data |
| | Appendix | L - Preventive Maintenance Record |
| | Appendix | M - References |

SPECIFICATIONS FOR BUILDING WORKS - VOLUME I (SCA/4/I)

CONTENTS

| | | |
|------------|---|--|
| CHAPTER 1 | - | MATERIALS |
| CHAPTER 2 | - | SITE PREPARATION, EXCAVATION AND EARTHWORK |
| CHAPTER 3 | - | MORTAR |
| CHAPTER 4 | - | CONCRETE |
| CHAPTER 5 | - | REINFORCED CEMENT CONCRETE |
| CHAPTER 6 | - | BRICK WORK AND BLOCK WORK |
| CHAPTER 7 | - | STONE WORK |
| CHAPTER 8 | - | WOOD WORK |
| CHAPTER 9 | - | METAL WORK |
| CHAPTER 10 | - | IRON MONGERY |
| CHAPTER 11 | - | WALL CEILING AND FLOOR FINISHES |
| CHAPTER 12 | - | ROOF COVERING AND ROOF DRAINAGE |
| CHAPTER 13 | - | GLAZING |
| CHAPTER 14 | - | PAINTING AND DECORATION |
| CHAPTER 15 | - | DEMOLITION |
| CHAPTER 16 | - | MISCELLANEOUS BUILDING WORKS |

SPECIFICATIONS FOR BUILDING WORKS - VOLUME II (SCA/4/II)

CONTENTS

- CHAPTER 1 - WATER SUPPLY
- CHAPTER 2 - SANITARY INSTALLATION
- CHAPTER 3 - DRAINAGE

STANDARD SPECIFICATIONS FOR CONSTRUCTION AND MAINTENANCE OF ROADS AND BRIDGES (SCA/5)

CONTENTS

| | |
|------|--|
| 100 | GENERAL |
| 200 | SITE CLEARING |
| 300 | EARTH WORKS |
| 400 | SUB BASES, BASES AND SHOULDERS |
| 500 | SURFACE APPLICATIONS, SURFACE DRESSING AND SURFACINGS |
| 600 | UNPAVED ROADS |
| 700 | DRAINAGE CONSTRUCTION |
| 800 | INCIDENTAL CONSTRUCTION |
| 900 | RIGID PAVEMENTS |
| 1000 | BRIDGES AND OTHER STRUCTURES |
| 1100 | MAINTENANCE OF CARRIAGEWAY |
| 1200 | MAINTENANCE OF SHOULDERS AND ROAD SIDE |
| 1300 | MAINTENANCE OF DRAINAGE SYSTEMS |
| 1400 | MAINTENANCE OF BRIDGES AND CAUSEWAYS |
| 1500 | MAINTENANCE OF ROAD SIGNS AND MARKINGS |
| 1600 | QUALITY CONTROL OF WORKS |
| 1700 | MATERIAL DETAILS |
| 1800 | DESIGNATION OF TESTS FOR QUALITY CONTROL OF MATERIAL AND WORKS |

SPECIFICATIONS FOR COASTAL & HARBOUR ENGINEERING WORKS (SCA/6)

CONTENTS

| | | |
|---------------------|---|---|
| CHAPTER 1 | - | INTRODUCTION |
| CHAPTER 2 | - | MATERIALS |
| CHAPTER 3 | - | PRE-CAST /PRE-STRESSED CONCRETE PILES AND SHEET PILES |
| CHAPTER 4 | - | STEEL PILES FOR QUAY SIDE STRUCTURES |
| CHAPTER 5 | - | RECLAMATION AND SAND NOURISHMENT |
| CHAPTER 6 | - | CONSTRUCTION BLOCK WORK AND CAISSONS |
| CHAPTER 7 | - | BREAK WATERS, GROYNES AND REVETMENTS |
| CHAPTER 8 | - | DREDGING |
| CHAPTER 9 | - | OPERATION OF QUARRIES |
| CHAPTER 10 | - | RUBBER FENDERS |
| CHAPTER 11 | - | BOLLARDS |
| CHAPTER 12 | - | INVESTIGATIONS |
| CHAPTER 13 | - | SETBACK STANDARDS IN THE COASTAL ZONE |
| APPENDIX REFERENCES | | |
| TABLE 1 | - | GRADES OF CONCRETE FOR MARITIME STRUCTURES |
| FIGURE 1 | - | GRADING CURVE |

**SPECIFICATIONS FOR ELECTRICAL AND MECHANICAL WORKS
ASSOCIATED WITH BUILDING AND CIVIL ENGINEERING (SCA/8)**

CONTENTS

| | | |
|-----------|---|--|
| PART I | - | GENERAL REQUIREMENTS FOR ELECTRICAL AND MECHANICAL WORKS |
| PART II | - | ELECTRICAL INSTALLATIONS |
| PART III | - | AIR-CONDITIONING AND VENTILATION |
| PART IV | - | LIFTS |
| ANNEXURES | | |

**SPECIFICATIONS FOR BORED AND CAST IN-SITU REINFORCED
CONCRETE PILES (ICTAD/DEV/16)**

CONTENTS

| | | |
|-----------|---|--|
| SECTION 1 | - | GENERAL CONDITIONS SPECIFIC TO PILING WORK |
| SECTION 2 | - | GENERAL REQUIREMENTS FOR MATERIALS |
| SECTION 3 | - | GENERAL REQUIREMENTS OF WORKMANSHIP |
| SECTION 4 | - | SPECIAL REQUIREMENTS FOR PILES FOUNDED ON ROCK |
| SECTION 5 | - | PILE TESTING BY MAINTAINED LOAD TEST |

SCHEDULES (TO BE COMPLETED)

| | | |
|------------|---|---------------------------|
| SCHEDULE 1 | - | INFORMATION |
| SCHEDULE 2 | - | PERFORMANCE SPECIFICATION |
| SCHEDULE 3 | - | SPECIFICATION AMENDMENTS |
| SCHEDULE 4 | - | SPECIFICATION ADDITIONS |

**SPECIFICATIONS FOR SITE INVESTIGATION FOR BUILDING WORKS
AND SAMPLE BILL OF QUANTITIES (ICTAD/DEV/17)**

INDEX

SPECIFICATIONS

1. PRELIMINARIES
2. DEFINITIONS
3. GENERAL REQUIREMENTS
4. BOREHOLES
5. PITS AND TRENCHES
6. SOIL SAMPLING
7. ROCK SAMPLING
8. GROUND WATER
9. DAILY REPORTS
10. IN SITU TESTS
11. LABORATORY TESTS
12. REPORTING
13. ALTERNATIVE PROGRAMME

APPENDIX 1 - STANDPIPES FOR GROUNDWATER OBSERVATIONS

SCHEDULES (TO BE COMPLETED)

- SCHEDULE 1 - INFORMATION
- SCHEDULE 2 - EXPLORATORY HOLES
- SCHEDULE 3 - SPECIFICATION AMENDMENTS
- SCHEDULE 4 - SPECIFICATION ADDITIONS

BILL OF QUANTITIES (TYPICAL)