



Contract **TOOLBOX**TM

for the Construction Industry

TOOL 1
How clients and contractors
ensure success

HB 226.1—2000

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ABOUT THE AUTHOR

Nathan McDonald has a Bachelor of Mechanical Engineering, a Masters Degree Engineering Practice and industry qualifications in scaffolding, rigging, welding supervision and quality management system auditing.

He has been exposed to numerous types of contracts, purchase orders, instructions and standards from both the client and the contractor perspectives for the last decade.

During this experience, Nathan has found that construction industry is predominantly run by people who have been trained in a particular technical discipline but have had little training in the skills and knowledge required for managing tendering and contracting situations. This gap sparked the development of the Contract TOOLBOX™ for the Construction Industry.

Nathan presents corporate and public workshops that complement this TOOLBOX™. Information to help you plan, book and deliver a tailored in-house workshop can be found at the Contract TOOLBOX™ internet site.



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An important part of this TOOLBOX™ is the references to publications by Standards Australia; the Australian Procurement and Construction Council (APCC); Construction Industry Development Agency (CIDA) and Construction Information Systems (CIS).

With appreciation, Nathan McDonald

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Preface

Contract TOOLBOX™ for the Construction Industry is a set of stand-alone inter-linked books and reference wallcharts that explain how clients & contractors ensure contracting success.

Each book and chart in the TOOLBOX™ has been designed to solve a different problem - a lot like the tools in a tradesman's toolbox.

It has been prepared by Nathan McDonald and published by Standards Australia.

The concepts and explanations are equally applicable to design, construct, supply, installation and maintenance contracts.

The TOOLBOX™ collates, summarises and presents the scope of Australian contracting Standards and practices.

Contract TOOLBOX™ will be beneficial for clients, contractors, subcontractors, consultants, insurers and dispute resolvers.

In particular the TOOLS will help:

- cost estimators, contract managers and administrators
- architects, engineers, quantity surveyors, surveyors, tradesmen and lawyers
- contract supervisors and superintendents
- quality assurance, environmental; and occupational health, safety and rehabilitation representatives
- trade apprentices and university graduates

TOOL 1 has been designed as the master document. It is a generic introduction to how clients & contractors ensure contracting success in the construction industry.

It introduces the concepts and provides references to current standards of practice.

In particular it explains the contracting process which includes tendering, contract administration, dispute resolution and risk management.

It explains the common problems in the industry and provides references to the other TOOLS in the TOOLBOX™ that solve them.



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Chapter 1

Introduction

Contracts in the construction industry are often known as purchase orders, sales, assignments, subcontracts, exchanges, trades, bargains, barter, deals and agreements.

This handbook is known as TOOL 1 of the Contract TOOLBOX™ for the Construction Industry. It explains how clients & contractors ensure contracting success in the construction industry. The concepts and explanations are equally applicable to design, construct, supply, installation and maintenance contracts.

Chapter 2 sets the scene by describing the construction contracting industry. In particular, it describes what the commonly contracted services and products are, and the parties involved in those contracts. It then identifies eight questions these parties must answer to ensure contract success.

Chapters 3 and 4 split these questions into those that must be answered by the parties when acting as a client and those when acting as a contractor.

The common contracting risks and how parties reduce them is explained in chapter 5.

Chapter 6 describes the common methods clients use to select contractors.

The common dispute resolution techniques are described in chapter 7.

This handbook, TOOL 1, has been designed to work in conjunction with:

- **TOOL 2: Review of common contract conditions (HB 226.2—2000)**
An explanation of the common conditions within construction industry contracts. In particular it discusses the typical requirements within the commercial conditions and technical specification sections of the contract. It also describes the commonly referenced documents such as drawings, bills, schedules, construction programs, industry standards, codes of practice and government legislation.
- **TOOL 3: Review of commonly referenced standards (HB 226.3—2000)**
Summaries of the Standards commonly referenced in construction industry contracts, such as tendering, commercial conditions, management systems, bills & schedules; and construction programming. It also summarises the parent technical standards of the industry such as concrete, timber & metal structures; pressure piping, vessels & boilers; pipelines, non-destructive testing of metallic products & electrical installations. It may be equally used as a starting point for your contract review process; as a checklist for meetings between the client, contractor and third parties; or as a base for the development of inspection and test plans.



- TOOL 4: Book of reference wallcharts (HB 226.4—2000)
 A collation and graphically presentation of the information introduced in TOOLS 1, 2 and 3; such as:
 1. How clients ensure contract success
 2. How contractors ensure contract success
 3. Common contracting risks and how to reduce them
 4. Common contract conditions
 5. Construction products & their standards
 6. Tendering & contracting standards commonly referenced in the construction industry
 7. Trade specific standards commonly referenced in the construction industry
 8. Contractor Tendering Pre-qualification Criteria for Small Projects (CIDA 17—1995)
 9. Contractor Tendering Pre-qualification Criteria (CIDA 18—1995)
 10. Subcontractors Tendering Pre-qualification Criteria (CIDA 19—1995)
 11. Management systems (quality, occupational health & safety; environment and legal compliance)
 12. Quality management systems – Requirements (AS/NZS ISO 9001 (Int):2000)

In particular the structure of:

 - chapter 3 matches WALLCHART 1
 - chapter 4 matches WALLCHART 2
 - chapter 5 matches WALLCHART 3
- TOOL 5.x: Comparison checklists for industry Standards (HB 226.5.x)
 A series of handbooks that compare the *common* commercial conditions (introduced in TOOL 2) with those in *popular* industry Standards. It also includes common questions asked about the requirements within these Standards and where the answers are found.
- TOOL 6.x: Collections of essential contracting standards (HB 226.6.x)
 A number of collections of Standards commonly referenced in construction industry contracts; such as tendering, contractor pre-qualification criteria, commercial conditions, management systems (quality, occupational health & safety, environment & legal compliance); bills & schedules; and construction programming.

The Contract TOOLBOX™ suite uses the following icons to flag your attention.



*Provides side information that reinforces the topic just mentioned. For example it may describe a **typical working situation** or present an **extract** from an industry Standard or Code of Practice.*



*Identifies that there is **further information** about the topic just covered elsewhere in the Contract TOOLBOX™.*



Identifies where you can find other information and resources dealing with the topic just mentioned.



*Identifies points of interest that requires special **attention** or **caution**.*

Chapter 2

Contracting in the construction industry

This chapter describes:

- the common services and products contracted in the construction industry
- who is involved in those contracts, and
- eight questions that must be answered by the contracting parties to ensure success.

2.1 Common services and products

The construction industry is generally considered to be more than the *construction* act itself. It is often taken to include design, supply, installation and maintenance services.

These services are often matched to a particular product to form the contract. Figure 1 shows some of the service/product combinations commonly contracted in the construction industry. As can be seen the possible variations are enormous.



A client may want the contractor to:

- *design a commercial building, bridge or a steel mill*
- *construct a school building, marine structure or a road tanker*
- *supply a train or a ferry*
- *install mining equipment or a mineral processing plant*
- *maintain an aircraft or a railway*

Figure 1

