

Design Economics

Module Code ACBA66001

Level 6

Credits 20

JACS CODE – K240

House Rules



Health and Safety Moment



New Rules of Measurement

The RICS new rules of measurement (NRM) suite of documents in context

The *RICS new rules of measurement* (NRM) is a suite of documents issued by the RICS Quantity Surveying and Construction Professional Group. The rules have been written to provide a standard set of measurement rules that are understandable by anyone involved in a construction project. The rules provide essential guidance to all those involved in, as well as those who wish to be better informed about, the cost management of construction projects. Although the *RICS new rules of measurement* are principally based on UK practice, the requirements for a coordinated set of rules and underlying philosophy behind each volume have worldwide application.

- + **NRM 1: Order of cost estimating and cost planning for capital building works**
- + **NRM 2: Detailed measurement for building works**
- + **NRM 3: Order of cost estimating and cost planning for building maintenance works**

NRM 1: Order of cost estimating and cost planning for capital building works

This volume provides indispensable guidance on the quantification of building works for the purpose of preparing cost estimates and cost plans. Direction on how to quantify other items forming part of the cost of a construction project, but which are not reflected in the measurable building work items, is also provided – i.e. preliminaries, overheads and profit, project team and design team fees, risk allowances, inflation, and other development and project costs.

NRM 1 is the ‘cornerstone’ of good cost management of construction projects – enabling more effective and accurate cost advice to be given to clients and other project team members, as well as facilitating better cost control.

Although written primarily for the preparation of order of cost estimates and cost plans, the rules will be invaluable when preparing approximate estimates.

In addition, the rules can be used as a basis for capturing historical cost data in the form required for order of cost estimates and elemental cost plans, thereby completing the ‘cost management cycle’.

NRM 2: Detailed measurement for building works

This volume provides fundamental guidance on the detailed measurement and description of building works for the purpose of obtaining a tender price. The rules address all aspects of bill of quantities (BQ) production, including setting out the information required from the employer and other construction consultants to enable a BQ to be prepared, as well as dealing with the quantification of non-measurable work items, contractor designed works and risks. Guidance is also provided on the content, structure and format of BQ, as well as the benefits and uses of BQ. While written mainly for the preparation of bill of quantities, quantified schedules of works and quantified work schedules, the rules will be invaluable when designing and developing standard or bespoke schedules of rates.

These rules provide essential guidance to all those involved in the preparation of bill of quantities, as well as those who wish to be better informed about the purpose, use and benefits of bill of quantities.

NRM 3: Order of cost estimating and cost planning for building maintenance works

This volume provides essential guidance on the quantification and description of maintenance works for the purpose of preparing initial order of cost estimates during the preparation stages of a building project, cost plans during the design development and pre-construction stages, and detailed, asset-specific cost plans during the pre-construction phases of a building project. The guidance provided by the rules also aids the procurement and cost control of maintenance works. The rules follow the same framework and premise as *NRM 1: Order of cost estimating and cost planning for capital building works*. Consequently, they give direction on how to quantify and measure other items associated with maintenance works, but which are not reflected in the measurable maintenance work items – i.e. maintenance contractor's management and administration charges, overheads and profit, other maintenance-related costs, consultants' fees and risks in connection with maintenance works.

NRM 3: Order of cost estimating and cost planning for building maintenance works

Unlike capital building works projects, maintenance works are required to be carried out from the day a building or asset is put to use until the end of its life. Accordingly, while the costs of a capital building works project are usually incurred by the building owner/developer over a relatively short-term, costs in connection with maintenance works are incurred throughout the life of the building – over the long-term. Consequently, the rules provide guidance on the measurement and calculation of the time value of money, guidance on using the measured data to inform life cycle of cost plans and forward maintenance plans, as well as VAT, and taxation.

NRM 3: Cost estimating and cost planning for building maintenance works, together with *NRM 1: Order of cost estimating and cost planning for capital building works*, presents the basis of good cost management of capital building works and maintenance works – enabling more effective and accurate cost advice to be given to clients and other project team members, as well as facilitating better cost control.

The rules of measurement for elemental cost planning are set out below.

- Group element 0: Facilitating works
- Group element 1: Substructure
- Group element 2: Superstructure
- Group element 3: Internal finishes
- Group element 4: Fittings, furnishings and equipment
- Group element 5: Services
- Group element 6: Prefabricated buildings and building units
- Group element 7: Work to existing buildings
- Group element 8: External works
- Group element 9: Main contractor's preliminaries
- Group element 10: Main contractor's overheads and profit
- Group element 11: Project/design team fees
- Group element 12: Other development/project costs
- Group element 13: Risks
- Group element 14: Inflation