

The piece-rate system, especially, increases the demand for a well founded knowledge of the production process and creates relationship between the time worked and the piece-rate.

In order to determine the piece-rate, it is necessary to know how much time is required to do the particular job (operation or work piece). There is no single time for each job. How long it takes, is dependent upon the conditions under which the work is done, primarily the conditions with regard to plant usage, the planning and organisation of the work, the methods, working and consideration of constructional details with regard to the complexity of the design and nature of the materials used.

In the application of piece-rate price lists used nationwide the payment for job performance for each individual project must be judged entirely according to the prerequisites of the price list.

The labour price lists must undergo a constant revision with the generally changing work methods.

(2) *The special labour laws of Sweden*

The law which concerns the labour market in Sweden is usually referred to as the 'laws of labour peace'. Of these laws, the Labour Collective Agreements Act of 1928 is the most important. Under this law, the employer is bound by the collective contract which his organisation has concluded with its opposite number, the owners. By an express provision, any individual agreement that conflicts with a valid collective contract is void and may carry a penalty.

A characteristic of the labour market is that direct action such as strikes and lockouts are permitted in principle, but the collective Agreements Act makes one exception to this rule: during the validity of a collective contract the contracting parties of their members may not resort to direct action in a dispute on the interpretation of the contract nor with the object of altering the terms of the contract, e.g., to force through higher wages.

Only in other circumstances are strikes and lockouts permitted. 'Collection blockade', i.e., direct action aimed at forcing the disbursement of workers' uncontested arrears of wages, are unfortunately by no means rare, nor are blockades against employers who refuse to conclude collective contracts with the trade union.

Under the Conciliation Act the government appointed eight mediators who—each in his own particular district—must intervene when a labour dispute occurs.

INTEREST OF SWEDEN TO THE U.K. MARKET AND THE QS PARTICULARLY

Due to the distance from the United Kingdom the country has little to offer regarding exports for the building market because of its own manufacturing capacity although specialised high quality goods may have a limited market.

While Sweden differs little from the rest of Europe regarding the organisation of technical accounting i.e., the architect is responsible and the work is delegated to technicians, practice offers two very useful points which could be discussed in much greater detail in the U.K. First the 'fixed price' contracts which encourages the reduction in variations and second, the use of analysed bills of quantities which could easily be adopted over here if the N.B.S. and data co-ordinators were received with greater enthusiasm.

The author wishes to express his thanks to the Director of the Building Research Establishment for permission to prepare this paper privately. The views expressed are those of the author alone.

Technical Queries

The following is a selection of questions submitted to the Members' Advisory Panel, together with the replies which were forwarded to the enquirers. We would be interested to receive the comments of readers who may be able to amplify any of the replies or who may have different views to offer in respect of them.

Members sending queries to the Panel are particularly requested to ensure that all relevant information is included, especially in regard to the precise edition of which form of contact, the method of measurement, specification clauses and bill preambles. When forwarding photostatic reproductions of documents it would be appreciated if ten copies could be sent for distribution to Panel members, as it is not always possible to make satisfactory photostat copies of photostats.

Question

Measurement of timber receiving clear finish

I would be grateful for your advice regarding Clause P1(c) of the SMM. The above clause states that timber required to be selected and kept clean for staining or polishing shall be so described. In your opinion, would you say that the application of polyurethane varnish also comes into this category, or is there a particular reason why staining and polishing should be stated and not polyurethane?

Since the selection and preparation of the hardwood, prior to the application of polyurethane is exactly the same as that for staining and polishing, I would have thought that the principle is that a clear finish is required.

Answer

A clarification to Clause P1(c) of the SMM, issued in

September 1972 by the SJC, states: "The principle underlying this clause is to indicate that timber to be given a transparent finish or left in the white will require special selection and to be kept clean and must be so described."

Polyurethane is a fairly recent material and was not in use when the SMM was published. However, the requirements are obviously the same as for staining etc. i.e. (1) the wood must be *selected* as blemishes, damage etc. would show through the finish; (2) it must be *kept clean* for the same reason, involving special storage and protection.

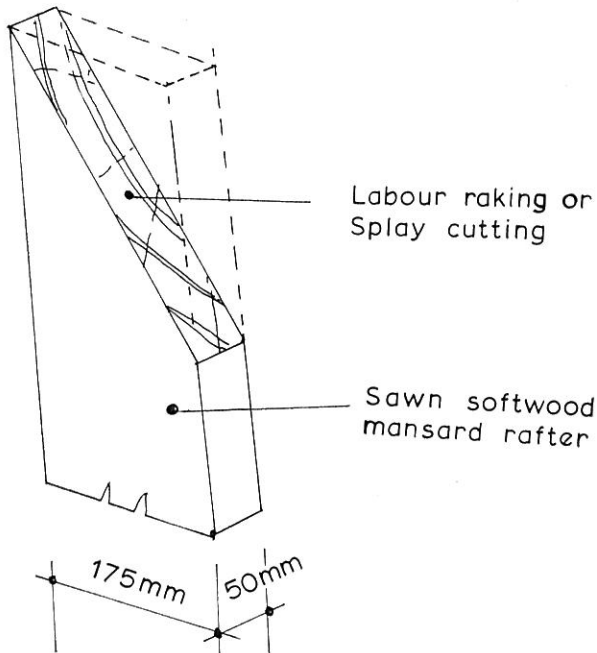
The Introduction and Clause A1 of the SMM emphasise the need for full descriptions. The items must be properly identified to enable the Contractor to consider the cost implications and price accordingly.

Question

Measurement of cutting to rafters

I write to you for advice on a problem recently encountered in connection with the interpretation of Clauses N6(a) and (c) of the SMM July 1968, Metric Edition.

I am currently in dispute with another member of the profession who holds the opinion that the labour item to the mansard rafter shown on the attached sketch is a splay cut and is deemed to be included under Clause N6(a).



I hold the converse view that the labour is a raking cut to be measured and billed separately under Clause N6(c).

Perhaps I should add that the QS in question has billed no raking cutting in his Bills of Quantities and I am endeavouring to recover reimbursement for costs incurred in carrying out this work and therefore would be most grateful to receive any views that you may have on the subject.

Answer

In the opinion of the Panel the cut sketched is a splay cut and is included with the item, as N6(a). It is not clear from the sketch exactly where the cut applies but it is assumed to be where the measured rafter meets the plate or other member.

Raking cutting is continuous along a length of timber or across a close timbered area and is measured in linear metres. It is not applicable to the case illustrated.

Question

Measurement of fencing

We are in dispute regarding three points which have arisen in connection with fencing work we are at present carrying out as main contractors.

The contract conditions are RIBA 1963, July 1975 Revision (Local Authorities Edition with Quantities) as amended by Scottish Supplement July 1975 and the contract bills have been prepared as per the Standard Method of Measurement of Building Work, 5th Edition, Metric.

The three points where we consider that we are entitled to additional payment are as follows:—

1. All fence timber is dressed.
2. Excavation of post holes through existing rubble, hardcore and tarmacadam.
3. Application of 1 coat Xyladecor in factory and 1 coat on site.

Our reasons for claiming additional payment are as follows:—

1. Dressing of Timber. No mention is made in either the preambles or the bill items that timber is to be dressed. The Standard Method states that timber shall be deemed to be sawn on all faces and edges unless otherwise stated and that wrought timber shall be so described.
2. Post Hole Excavation through Tarmacadam, rubble, hardcore etc. The Standard Method states that breaking up tarmacadam and the like on the surface of the ground shall be given separately. No item is taken for this in the Bill of Quantities and we therefore consider that we should be paid for the additional cost of excavation through this material.
We have already been instructed to remove the hard material off site and trust we will be paid for the additional cost of removal in lieu of spreading on site.
3. Application of Xyladecor The bill item states that the Xyladecor is to be applied in two coats as per the manufacturer's instructions. The manufacturer's instructions list three methods of application:—
 1. By brush.
 2. By dipping.
 3. By spray.

The Standard method states that material required to be applied by a particular method shall be so described (W1(c)) and also that work required to be executed on members before they are fixed shall be so described (W1(b)). In the absence of this information we naturally assumed that the Xyladecor would be applied in two coats on site.

The dipping of the timber in the factory has meant that far greater quantities of Xyladecor have been used than if the Xyladecor was applied on site especially in view of the fact that the original pressure treatment with Tanalith "C" has been omitted. There are also considerable labour costs involved in unloading dipping, stacking and reloading of timber and we therefore consider that we should be remunerated for the additional cost involved.

The Local Authority Surveyors' attitude with regard to the three points is as follows:

1. Dressing of Timber. They agree that no mention is made of the timber being dressed either in the bill item or the preambles. However, they correctly state that we received a drawing with the contract documents at the tender stage which indicates that the fencing is to be dressed. Our position is that it is no function of the contractor to check the adequacy or otherwise of the bill items with regard to what is shown on the drawings at the tender stage and accordingly we priced the work on the basis of the preamble and bill item only. Their contention is that we should have noticed the discrepancy and queried this at the tender stage.
2. Post Hole Excavation through Tarmacadam, rubble, hardcore etc. They have now agreed to additional payment in respect of tarmac but not for rubble etc. The material taken out of the post hole excavations consisted of large boulders, rubble and the like and our contention is that the cost of excavating through this material should be subject to additional payment.

3. Xyladecor. Since the manufacturer's instructions list three separate methods of application, the local authority surveyors say that we should have queried this at the tender stage. (We were subsequently instructed to dip the timber in Xyladecor before erection and a second coat to be applied on site).

Reply

1. Dressing of Timber – JCT Form of Contract clause 1(2) requires the contractor to seek the architect's instructions if he should find a discrepancy between contract documents. He has an obligation to do this if he discovers a discrepancy but failure to do so (he may not even have noticed it) does not render him legally liable in any way. The architect must issue instructions as to which document is correct and if this requires an amendment to the bill of quantities, a variation order must be issued and the price adjusted under clause 11. When tendering the contractor must price the bill as described.
2. Post Hole Excavation – The bill description is adequate as far as SMM clause Y17(b) is concerned. This refers back to D13 and D14 for excavating through various materials but rubble is not included. However, D1(a) states "Any information available concerning the nature of the ground and strata shall be given". If this material was known to the QS to be present, he should have stated so in the preambles or item description. On the other hand, the bill may say excavation "through any material met with" or similar, when the onus would be on the contractor to satisfy himself as to the nature of the ground. The panel cannot be more specific on the information provided.
3. Xyladecor – It is considered that the bill description does not comply with the requirements of SMM W1(b) and (c). Reference to manufacturer's instructions is ambiguous in this case and the particular treatment required should have been stated. From the information provided at tender stage, it would be difficult to come to any other assumption than that the Xyladecor was to be applied in two coats on site, as the timber was to be tanalised first. When the tanalising was later omitted, the Xyladecor treatment should have been precisely described. If any Xyladecor was required to be applied before fixing, it should have been measured and described as such, as should any method of application other than brushing.

Question

Measurement of Joinery

A contract was entered into for the erection of a children's home. The tender was a fixed price tender and was based on Bills of Quantities measured in accordance with the Standard Method of Measurement, Fifth edition (metric).

The dispute which has arisen refers to the Joinery Section of the Bills of Quantities and the interpretation of the Standard Method of Measurement Section P, item 1(b). The Preamble to the Joinery section states that, "Unless specifically described as 'Finished' size, the whole of the dimensions and sizes are nominal." The whole of the Joinery was taken off and billed stating nominal sizes with an allowance of 3mm per face used from the finished sizes

required, i.e. if a finished size of 80mm x 63mm were required, this was billed as 86mm x 69mm. The usual allowance for waste etc. on the sizes should be included in the rates quoted by the General Contractor. However, the Contractor disagrees with the Quantity Surveyor's interpretation and his position is stated below.

Contractor's position :

The drawings give sizes, in the main, as finished sizes. The Quantity Surveyor wishes to use these finished sizes with an addition of 3mm per face, as the nominal size of the timber.

We maintain that the nominal size is the size of the timber which has to be bought to enable the finished size to be produced. We propose to use the Timber Research and Development leaflet of metric timber sizes and maintain that these are the nominal sizes of timber which should be used.

As an example, if the drawing showed a finished size of 80 x 63, we maintain that the nominal size should be 100 x 75, whereas the Quantity Surveyor would wish to use an arbitrary size of 86 x 69.

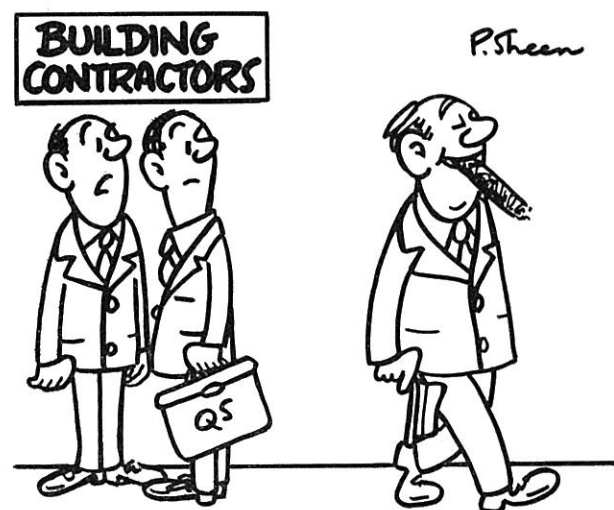
Answer

SMM P1(b) is quite specific in stating that 3.2mm shall be allowed from the nominal size for each wrought face or edge except where the work is described as being to finished sizes.

In this instance the work has been billed as nominal size and therefore the Quantity Surveyor is correct in allowing 3mm per face, (strictly speaking this should be 3.2mm).

Where the preamble to the Joinery section refers to "unless specifically described as 'Finished' size . . ." this refers to the description in the bill, notwithstanding that the drawings indicate 'finished' sizes.

The attention of the Enquirer is drawn to "Comments and Clarifications on the SMM" issued by the Standing Joint Committee in September 1972 which recommends under P1(b) that when the SMM 5th Edition (Metric) is used, Surveyors should adopt the second alternative given in Clause P1(b) namely to give finished sizes.



"Where, in this day and age, did he get a coach and horses to drive through our contract?"