

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. All of the queries relate to section F of the SMM. 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 contract, 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

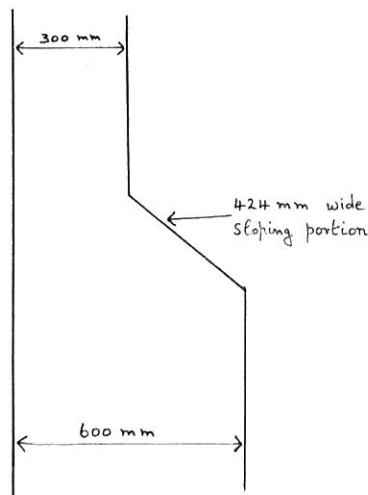
Formwork to Sloping Surface

A problem has arisen regarding certain clauses in the Standard Method of Measurement regarding formwork to battering walls and ditto to upper sloping surfaces.

Would you please inform me at what angle formwork to battering walls becomes formwork to upper sloping surface as this is not stated in the Method.

The problem has occurred on a retaining wall around the site where a 424mm sloping portion occurs approximately half way up the wall (see diagram below). The angle of this sloping portion is approximately 45° from the horizontal.

Would you please inform me of your opinion regarding measurement of the above.



SECTION

Answer

Clause F 20 (a) states "Formwork shall be measured . . . including the upper surfaces of the work sloping more than 15° from the horizontal." This figure is also quoted in F21 (a) (iii) and (xi) and it is reasonable to assume that this is the point at which formwork to upper surfaces becomes measurable.

The SMM is not definitive on at what point a section of battering wall becomes an area of upper sloping surface. It is a matter for individual interpretation. However, in this case the Panel is unanimous in considering that the sloping area of the wall should be measured as "formwork to upper sloping surface", though opinions varied as to whether this should be under F20 (a) or F21 (a) (iii) or (xi).

Question

Protection of power-floated finish

With the increasing use of powerfloated concrete as a floor finish, the following interpretation of the SMM appears to be arising more frequently.

Protection (F68) is measurable in Bills at the end of the concrete work, as normal, although the method of measuring powerfloating varies from including the finish with the floor description and measuring the operation separately, presumably because the measurement of unset concrete changes according to the thickness (personally I feel any future SMM must allow for measuring powerfloating separately irrespective of the thickness of the concrete as a separate operation subsequent to grading, tamping etc.)

With the exception of Excavation, Piling, Underpinning, Carpentry, Structural Steelwork and Fencing, protection to the works is a measurable item.

In the case of Joinery (floors) Asphalt work (floor finishings and pavings) and Plasterwork (floor finishing and pavings) individual items stating the area to be protected are measurable in addition.

I would appreciate your comments to my contention that a similar additional item as found in Joinery, Asphalt work and Plasterwork is equally applicable to the Concrete when a powerfloated finish is specified in the completed structure. Sometimes on housing contracts a powerfloated finish to oversite concrete obviates the need for a screed, upon which vinyl floor tiles are laid to become the floor finish.

I would appreciate your comments as to how you would distinguish between protecting two equal finishes, both subject to damage for long periods of the construction programme, one being the floor finish, and the other receiving tiling at such a late stage of construction, so as to render any differentiation purely academic.

Answer

Under the present SMM there is no requirement to separate protection to power-floated floors from other concrete work. It is therefore for the contractor, in pricing the item, to have regard to the quantity of power-floated finish measured in the bill, so that he can include for whatever extra protection he considers this work requires.

The Panel agrees with the enquirer that it would be useful for protection to power-floated finish to be measured separately and an area stated. There is nothing to stop quantity surveyors doing this now, and indeed some do, feeling that this more adequately fulfils the requirement of A1 to "fully describe". Another method is to include protection of power-floated finish with the item for the finish itself.

However the present situation is that an item for "Protection" under F68 complies with the SMM.

Question

Measurement of reinforcement "chairs"

The Contract is the JCT Standard Form – Private – With Quantities with Clause 12 unaltered in any way.

The following is an extract from the Concretor Preambles : 2/50L The Contractor shall supply and fix all necessary chairs required to maintain the reinforcement in the correct position. The spacing of chairs and the diameter of the bars used in their manufacture shall be agreed with the Engineer. The steel used in this fashion and not included in bending schedules shall be allowed for in the measured rates for "Scheduled Steel".

The following is the heading immediately preceding the reinforcement in the measured work :

"High yield steel reinforcement as described, including all bending, hooking, tying wire, distance blocks and ordinary spacers".

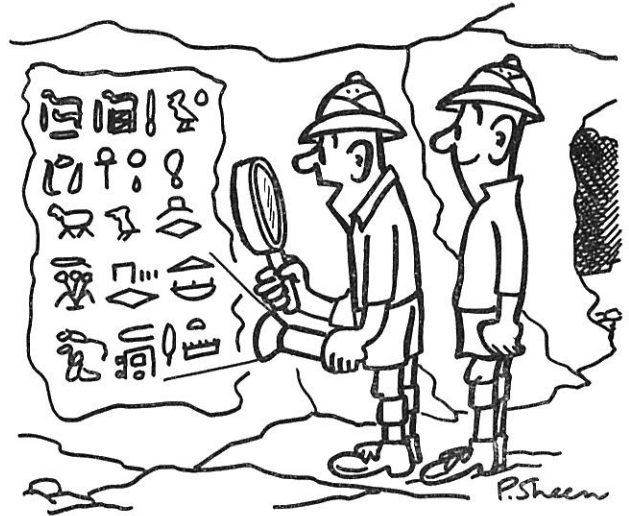
The Contract includes approximately 1,000 square metres of a suspended RC slab 300mm thick involving top and bottom steel.

No chairs are measured in the BofQ as required by Clause F17(g) of the SMM; neither are they detailed on the bending schedules although the structural engineer has directed them to be used.

I maintain there is a valid claim for an extra payment for these as there is no specific indication that the relevant section of the Bill of Quantities is not measured in accordance with the SMM, but the "opposing" quantity surveyor maintains that the preamble gives sufficient qualification to the SMM.

Answer

JCT Clause 12(1) requires any deviation from the SMM to be stated in respect of any specified item. In the opinion of the Panel, bill preamble 2/50L does not fulfil this obligation. Further, the bill items on page 3/99 are preceded by descriptions which include specifically "ordinary spacers". It is felt therefore that a valid claim exists for payment for special spacers as SMM Clause F 17(g). A variation order should be issued to cover this.



"It's notifying the architect of a 50 year delay in building a pyramid."

Correspondence

Sir,

SMM – 6th Edition

We view with considerable alarm the implications of the press release issued on 20th January 1978 and reported under QS Notes in the Chartered Surveyor of March, 1978 regarding the impending publication of SMM6.

A positive proposal to revise the SMM, incorporating as it apparently does major changes in methods of measurement and also reputedly requiring presentation of greater detail has never previously been implemented at a time when a further major revision (SMM7) was in the course of preparation.

Whilst we are informed that there will be a reasonable period of time between the publication of SMM6 and SMM7 it is vitally important that such a period be of the order of 10 years or more (and certainly not less) for without such an undertaking this profession could find itself operating THREE systems at the same time.

Such an arrangement is unthinkable.

We have no way of knowing what the proposed extent of the "reasonable period of time" is to be (grass roots are always the last to be told anything) but we hazard the conjecture that the period will be considerably less than the minimum suggested above.

If the current requirements of SMM5 are so outdated as to require the apparently drastic treatment in store for us under SMM7 what madness suggests that we should also suffer the full interim revision of SMM6 to tide us over.

Surely the practical answer is a progressive sectional revision of SMM5 as a true stepping stone to SMM7.

We believe that this profession can only hope to be efficient (i.e. remain profitable) if essential fundamental procedural changes are made gradually; such proposed changes only being acceptable where simplification of treatment and presentation is achieved.

Yours faithfully,

H. Blundell, FRICS (Fellow)
H. I. Everiss, (Fellow)
P. H. T. Stephenson, (Fellow)
D. Rogers, FRICS (Fellow)
R. Snowling, FI Arb, FRSH (Fellow)
M. B. Smith, FRICS (Fellow)
A. P. Jeyes, FRICS, FI Arb (Fellow)
J. Dutton, ARICS (Associate)

Liverpool, Merseyside