

### Computer Programmes for Use in Structural and Geotechnical Submissions

An authorized person (AP) or a registered structural engineer (RSE) may use computer calculations to support his design. Where he intends to do so, he should ensure that the programme from which such calculations are produced is acceptable to the Buildings Department (BD) before submitting plans and calculations for approval under the Buildings Ordinance. Submissions aided by a computer programme without prior acceptance by BD may be disapproved under Buildings Ordinance section 16(1)(i).

2. To enable BD to vet proposed computer programmes, the "programme controller" authorized to operate the programme should forward relevant documentation of the programme to BD for assessment. This documentation will be kept in BD for record.

3. Documentation for computer programmes should include a users' manual giving the following information :

- (a) method of data input;
- (b) interpretation of results;
- (c) theory of analysis used and references to Codes of Practice, Building Regulations or other documents, upon which the programme is based;
- (d) flow charts indicating the calculations;
- (e) limitations and applicability of the programme; and
- (f) examples illustrating all functions and characteristics.

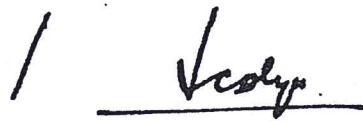
4. The "programme controller" may be required to provide additional test examples in order that the accuracy of the programme can be confirmed. A programme accepted by BD will be assigned a reference number, which should be quoted in submissions.

5. If the AP or RSE using the programme is himself not the "programme controller", endorsement should be produced to confirm that the programme has been executed by the "programme controller".

6. When using the programme for a submission, justifications on the simulation of the problems by mathematical models and the choice of parameters may be required. The analysis should also be compatible with the structural details and/or the ground conditions.

7. Documentation may not be required for computer programmes producing an output in a form which can be easily checked manually. However, a brief description and verification of the programme should accompany the submission for approval.

8. If changes are proposed to an accepted programme, please refer details of the changes to BD for consideration before using the revised programme.



(Helen C P Lai YU)  
Building Authority

Ref. : BD GR/OA/71

First issued December 1981

This revision April 1994 (AD/SE, GGE)

Index under : Computer Calculations - Structural & Geotechnical Submissions  
Structural & Geotechnical Submissions supported by Computer Calculations