

4.2.5 Electrical Engineering Services pertaining to Engineering Projects

- (1) The basic fee for normal services in the discipline of electrical engineering, pertaining to **Engineering Projects**, is determined from the table below. The fee is the sum of the primary fee and the secondary fee applicable to the specific cost of the works in respect of which the services were rendered on the project excluding the report stage described in clause 3.2.1 which shall be reimbursed on a time basis in terms of clause 4.5.

Cost of the Works		Basis of Fee Calculation	
For projects up to R 512 000		A Lump Sum or on a Time Basis	
Where the cost of the works:		Primary Fee	Secondary fee
Exceeds	But does not exceed		
R 512 000	R 1 280 000	R 64 000	12,5% on the balance over R 512 000
R 1 280 000	R 6 300 000	R 160 000	10,0% on the balance over R 1 280 000
R 6 300 000	R 12 850 000	R 662 000	8,0% on the balance over R 6 300 000
R 12 850 000	R 32 000 000	R 1 186 000	7,0% on the balance over R 12 850 000
R 32 000 000	R 64 000 000	R 2 526 500	6,0% on the balance over R 32 000 000
R 64 000 000	R 385 500 000	R 4 446 000	5,5% on the balance over R 64 000 000
R 385 500 000		R 22 129 000	5,5% on the balance over R385 500 000

- (2) For normal services relating to a description of the works mentioned in the first column of the following table, the proportion of the basic fee relating to the specific item calculated in terms of clause (1) is normally multiplied by the category factor mentioned against that description in the second column of the table. In case more than one of the descriptions below applies, the effective factor will typically be the product of the factors involved.

These factors do not apply when fees are a lump sum or on a time basis.

Description of the Works	Typical factor by which basic fee is multiplied
Alterations to existing works or contractor development (Only applicable to the fees on the portion or section of works affected.)	1,25
Duplication of works (Only applicable to the design portion of the fees on duplicated works)	0,25

4.2.6 Mechanical Engineering pertaining to Building Projects

- (1) The basic fee for normal services in the discipline of mechanical engineering or wet services, pertaining to **Building Projects**, is determined from the table below. The fee is the sum of the primary fee and the secondary fee applicable to the specific cost of the works in respect of which the services were rendered on the project excluding the report stage described in clause 3.2.1 which shall be reimbursed on a time basis in terms of clause 4.5.

Cost of the Works		Basis of Fee Calculation	
For projects up to R 512 000		A Lump Sum or on a Time Basis	
Where the cost of the works:		Primary Fee	Secondary fee
Exceeds	But does not exceed		
R 512 000	R 1 280 000	R 76 800	15,0% on the balance over R 512 000
R 1 280 000	R 6 300 000	R 192 000	12,5% on the balance over R 1 280 000
R 6 300 000	R 12 850 000	R 819 500	10,5% on the balance over R 6 300 000
R 12 850 000	R 32 000 000	R 1 507 250	9,5% on the balance over R 12 850 000
R 32 000 000	R 64 000 000	R 3 326 500	9,0% on the balance over R 32 000 000
R 64 000 000	R 385 500 000	R 6 206 000	8,5% on the balance over R 64 000 000
R 385 500 000		R 33 534 000	8,5% on the balance over R385 500 000

- (2) For normal services relating to a description of the works mentioned in the first column of the following table, the proportion of the basic fee relating to the specific item calculated in terms of clause (1) is normally multiplied by the category factor mentioned against that description in the second column of the table. In case more than one of the descriptions below applies, the effective factor will typically be the product of the factors involved.

These factors do not apply when fees are a lump sum or on a time basis.

Description of the Works	Typical factor by which basic fee is multiplied
Multi-tenant installations	1,25
Alterations to existing works or contractor development (Only applicable to the fees on the portion or section of works affected)	1,25
Wet services, for domestic hot and cold water and drainage pipe work inside buildings.	1,25
Duplication of works (Only applicable to the design portion of the fees on duplicated works)	0,25
For projects where the cost of the works exceeds R 300,000 and where bills of quantities are not required from the consulting engineer and all financial, tender and contractual matters are dealt with by the Quantity Surveyor or other parties.	0,75
As above, but bills of quantities for are not required from the consulting engineer and all financial, tender and contractual matters are dealt with by the consulting engineer (e.g. lump sum, nominated or selected sub-contracts, etc.)	0,90

4.2.7 Electrical Engineering services pertaining to Building Projects

- (1) The basic fee for normal services in the discipline of electrical engineering, pertaining to **Building Projects**, is determined from the table below. The fee is the sum of the primary fee and the secondary fee applicable to the specific cost of the works in respect of which the services were rendered on the project excluding the report stage described in clause 3.2.1 which shall be reimbursed on a time basis in terms of clause 4.5.

Cost of the Works		Basis of Fee Calculation	
For projects up to R 512 000		A Lump Sum or on a Time Basis	
Where the cost of the works:		Primary Fee	Secondary fee
Exceeds	But does not exceed		
R 512 000	R 1 280 000	R 76 800	15,0% on the balance over R 512 000
R 1 280 000	R 6 300 000	R 192 000	12,5% on the balance over R 1 280 000
R 6 300 000	R 12 850 000	R 819 500	10,5% on the balance over R 6 300 000
R 12 850 000	R 32 000 000	R 1 507 250	9,5% on the balance over R 12 850 000
R 32 000 000	R 64 000 000	R 3 326 500	9,0% on the balance over R 32 000 000
R 64 000 000	R 385 500 000	R 6 206 500	8,5% on the balance over R 64 000 000
R 385 500 000		R 33 534 000	8,5% on the balance over R385 500 000

- (2) For normal services relating to a description of the works mentioned in the first column of the following table, the proportion of the basic fee relating to the specific item calculated in terms of clause (1) is normally multiplied by the category factor mentioned against that description in the second column of the table. In case more than one of the descriptions below applies, the effective factor will typically be the product of the factors involved.

These factors do not apply when fees are a lump sum or on a time basis.

Description of the Works	Typical factor by which basic fee is multiplied
Multi-tenant installations	1,25
Alterations to existing works or contractor development (Only applicable to the fees on the portion or section of works affected)	1,25
Duplication of works (Only applicable to the design portion of the fees on duplicated works)	0,25
For projects where the cost of the works exceeds R 300,000 and where bills of quantities are not required from the consulting engineer and all financial, tender and contractual matters are dealt with by the Quantity Surveyor or other parties.	0,75
As above, but bills of quantities are not required from the consulting engineer and all financial, tender and contractual matters are dealt with by the consulting engineer (e.g. lump sum, nominated or selected sub-contracts, etc.)	0,90

4.2.8 Electronic Engineering Services

- (1) The basic fee for normal services in the discipline of electronic engineering, including work pertaining to **Building Projects**, is determined from the table below. The fee is the sum of the primary fee and the secondary fee applicable to the specific cost of the works in respect of which the services were rendered on the project excluding the report stage described in clause 3.2.1 which shall be reimbursed on a time basis in terms of clause 4.5.

Cost of the Works		Basis of Fee Calculation	
For projects up to R 512 000		A Lump Sum or on a Time Basis	
Where the cost of the works:		Primary Fee	Secondary fee
Exceeds	But does not exceed		
R 512 000	R 1 280 000	R 87 040	17,0% on the balance over R 512 000
R 1 280 000	R 6 300 000	R 217 600	13,5% on the balance over R 1 280 000
R 6 300 000	R 12 850 000	R 895 300	11,5% on the balance over R 6 300 000
R 12 850 000	R 32 000 000	R 1 648 550	10,0% on the balance over R 12 850 000
R 32 000 000	R 64 000 000	R 3 563 550	9,5% on the balance over R 32 000 000
R 64 000 000	R 385 500 000	R 6 603 550	8,5% on the balance over R 64 000 000
R 385 500 000	R 0	R 33 931 050	8,5% on the balance over R385 500 000

- (2) For normal services relating to a description of the works mentioned in the first column of the following table the proportion of the basic fee relating to the specific item calculated in terms of clause (1) is normally multiplied by the category factor mentioned against that description in the second column of the table. In case more than one of the descriptions below applies, the effective factor will typically be the product of the factors involved.

These factors do not apply when fees are a lump sum or on a time basis.

Description of the Works	Typical factor by which basic fee is multiplied
Alterations to existing works or contractor development (Only applicable to the fees on the portion or section of works affected)	1,25
Where equipment or systems are wholly of proprietary design or approved by a State authority (Only applicable to the design portion of the fees)	0,67
Duplication of works (Only applicable to the design portion of the fees on duplicated works)	0,25
For projects where the cost of the works exceeds R 440,000 and where bills of quantities are not required from the consulting engineer and all financial, tender and contractual matters are dealt with by the Quantity Surveyor or other parties.	0,75
As above, but bills of quantities for electronic works are not required from the consulting engineer and all financial, tender and contractual matters are dealt with by the consulting engineer (e.g. lump sum, nominated or selected sub-contract, etc.)	0,90

4.2.9 Services provided partially or in Stages

- (1) The following table shows typical percentages that are typically used for proportioning the basic fee for normal services over the various stages of the services. The actual percentage used should be adjusted for individual projects through negotiation and depending on the work involved in each stage, the value that can be added in each stage and any commercial considerations that may be applicable:

Stage of Services	Typical percentage points for each stage
Civil: Engineering Projects:	
Inception	5
Concept and Viability	25
Design Development	25
Documentation and Procurement	15
Contract Administration and Inspection	25
Close-Out	5
Structural: Engineering Projects:	
Inception	5
Concept and Viability	25
Design Development	30
Documentation and Procurement	10
Contract Administration and Inspection	25
Close-Out	5
Civil: Building Projects:	
Inception	5
Concept and Viability	25
Design Development	25
Documentation and Procurement	15
Contract Administration and Inspection	25
Close-Out	5
Structural: Building Projects:	
Inception	5
Concept and Viability	25
Design Development	30
Documentation and Procurement	15
Contract Administration and Inspection	20
Close-Out	5
Mechanical, electrical and electronic projects:	
Inception	5
Concept and Viability	15
Design Development & Documentation and Procurement	30
Contract Administration and Inspection	40
Close-Out	10

- (2) Where not all the stages of the normal services are provided by the consulting engineer, the fee is, subject to clause 4.1(7), calculated as a percentage of the total fee calculated in terms of this clause, which percentage is the sum of the percentage points appropriate to each stage as set out in the above table against those stages of the services provided by the consulting engineer, typically plus 10 percentage points to allow the engineer to become familiar with the project.

4.2.10 Cancellation or Abandonment

Should instructions having been given by the client to the consulting engineer to proceed with any of the stages of services set out in clause 0 and the whole or part of the works is **cancelled or abandoned or postponed for a period of more than six months**, the consulting engineer shall be remunerated for services performed, plus a surcharge of one tenth of the full fee which would have been payable to the consulting engineer had his services been completed in terms of his engagement.

4.3 Fees for Additional Services

- (1) The fees for additional services, contemplated in clause 3.3, are agreed to between the client and the consulting engineer as set out in clause 4.1.
- (2) For additional **services** as a result of the resumption of such services or the alteration or modification of designs on the instructions of the **client**, the **consulting engineer** is entitled to time based fees and actual costs incurred.
- (3) For the provision of a **construction monitoring service**, as contemplated in clause 3.3.2, the consulting engineer is typically entitled to recover from the client
 - (a) for monthly monitoring staff costs, the **total annual cost of employment** of such staff (as defined in clause 4.5(4)), divided by 12 and multiplied by one of the following:
 - (i) Case 1: Where payment is only made for actual time on site and site allowances are not paid separately:
2.1 times total cost of employment.
 - (ii) Case 2: Where payment is only made for actual time on site and site allowances are paid separately:
2.0 times total cost of employment.
 - (iii) Case 3: Where payment is made for leave and non-working days and site allowances are paid separately:
1.8 times total cost of employment.
 - (b) for part time monitoring staff costs, the amount payable to such staff at the hourly rates contemplated in clause 4.5; and
- (4) For all other costs, as set out in clause 4.6 the actual expenses incurred, multiplied by 1.10.
- (5) For duties under the **Occupational Health and Safety Act, 1993 (Act No.85 of 1993)**, as contemplated in clause 3.3.3, the consulting engineer shall, if so appointed by the client, be remunerated on a time and cost basis as agreed with the client.
- (6) For services as **lead consulting engineer**, as contemplated in clause 3.3.5, the lead consulting engineer is typically entitled to an additional fee of 10 percent (10%) of the total fees payable for the services.
- (7) For **engineering management services or services as the principal consultant**, as contemplated in clause 0, the consulting engineer will typically be remunerated as follows:
 - (a) The basic fee for services in the discipline of engineering management services, including work pertaining to **Building Projects**, is determined from the table below. The fee is the sum of the primary fee and the secondary fee applicable to the specific cost of the works in respect of which the services were rendered on the project.

Cost of the Works		Basis of Fee Calculation	
For projects up to R 512 000		A Lump Sum or on a Time Basis	
Where the cost of the works:		Primary Fee	Secondary fee
Exceeds	But does not exceed		
R 512 000	R 1 280 000	R 23 040	4,5% on the balance over R 512 000
R 1 280 000	R 6 300 000	R 57 600	3,5% on the balance over R 1 280 000
R 6 300 000	R 12 850 000	R 233 300	3,0% on the balance over R 6 300 000
R 12 850 000	R 32 000 000	R 429 800	2,5% on the balance over R 12 850 000
R 32 000 000	R 64 000 000	R 908 550	1,5% on the balance over R 32 000 000
R 64 000 000	R 385 500 000	R 1 388 550	1,5% on the balance over R 64 000 000
R 385 500 000		R 6 211 050	1,5% on the balance over R385 500 000

- (b) For normal services relating to a description of the works mentioned in the first column of the following table, the proportion of the basic fee relating to the specific calculated in terms of clause (a) is normally multiplied by the category factor mentioned against that description in the second column of the table. In case more than one of the descriptions below applies, the effective factor will typically be the product of the factors involved.

These factors do not apply when fees are a lump sum or on a time basis.

Description of the Works	Typical factor by which basic fee is multiplied
Multi-tenant installations	1,25
Alterations to existing works (Only applicable to the fees on the portion or section of works affected)	1,25

- (c) The following table is typically used to proportion the basic fee over the various stages of the services:

Stage of Services	Typical percentage points for each stage
Concept and design development	25
Design, documentation and tender	35
Construction	35
Completion of all engineering management services	5

- (8) For services as **principal agent of the client**, as contemplated in clause 3.3.8, the consulting engineer is typically entitled to an additional fee calculated at one percentage point (1%) of the total cost of the works comprising the project. The consulting engineer is not entitled to any fees for principal agent if he is not explicitly appointed as such. Services rendered as a **principal agent** can involve a considerable amount of essential work and the parties need to consider the work required and the corresponding remuneration carefully before such an appointment is concluded.

4.4 Value Based Fees

Certain projects and disciplines lend themselves to Value-based fees where the fee is negotiated between the parties based on the value arising out of the work done. Guidelines in this respect are in the process of development and are not included at this stage. Projects for which such fees will be applicable cannot be based on the cost of the Works but rather on the value generated by applying engineering skills to improve overall productivity and cost-effectiveness. Disciplines for which such fees will be particularly applicable include industrial engineering, for example.

4.5 Time Based Fees

- (1) Time based fees are all-inclusive fees, including allowances for overhead charges incurred by the consulting engineer as part of normal business operations, including the cost of management, as well as payments to administrative, clerical and secretarial staff used to support professional and technical staff in general and not on a specific project only.
 - (a) Time based fees are calculated by multiplying the hourly rate contemplated in clause 4.4, which is applicable to the consulting engineer or any other technical staff employed by the consulting engineer, with the actual time spent by such technical staff in rendering the services required by the client.
 - (b) Technical staff include all staff performing work directly related to the execution of the services the consulting engineer is engaged for by the client and excludes all administrative, clerical and secretarial staff used to support professional and technical staff in general and not on a specific project only, but includes the typing of letters, minutes, reports and documents for projects.
- (2) To determine the time based fee rates the persons concerned are divided into:-
 - (a) Category A, in respect of a private consulting practice in engineering, shall mean a top practitioner whose expertise and relevant experience is nationally or internationally recognized and who provides advice at a level of specialization where such advice is recognized as that of an expert.
 - (b) Category B, in respect of a private consulting practice in engineering, shall mean a partner, a sole proprietor, a director, or a member who, jointly or severally with other partners, co-directors or co-members, bears the risks of the business, or a person that takes responsibility for the projects and related liabilities of such practice and where his/her level of expertise and relevant experience is commensurate with the position, performs work of a conceptual nature in engineering design and development, provides strategic guidance in planning and executing a project and/or carries responsibility for quality management pertaining to a project.
 - (c) Category C, in respect of a private consulting practice in engineering, shall mean all salaried professional staff with adequate expertise and relevant experience performing work of an engineering nature and who carry the direct technical responsibility for one or more specific activities related to a project. A person referred to in Category B may also fall in this category if such person performs work of an engineering nature at this level.
 - (d) Category D, in respect of a private consulting practice in engineering, shall mean all other salaried technical staff with adequate expertise and relevant experience performing work of an engineering nature with direction and control provided by any person contemplated in categories A, B or C.
- (3) The time based fee rates are:-
 - (a) Calculated for a person in category-
 - (i) A and B at 22, 00 cents per hour;

- (ii) C at 17, 5 cents per hour; and
 - (iii) D at 16, 5 cents per hour,
 - for each R100 or part thereof of the **total annual cost of employment** of the person concerned, as contemplated in sub-clause (4); or
 - (b) based on such indicative time based fee rates as are determined from time to time by the Engineering Council of South Africa after consultation with service providers and service users: Provided that in all cases the client and consulting engineer may agree on a more appropriate fee to take account of the specific services to be rendered or expertise to be applied.
- (4) For the purposes of clause 4.5, the **total annual cost of employment** of a person means the total amount borne by an employer in respect of the employment of such a person per year, calculated at the amounts applicable to such a person at the time when the services are rendered, including –
- (a) Basic salary or a nominal market related salary, excluding profit share and asset growth;
 - (b) Fringe benefits not reflected in the basic salary, including:
 - (i) Normal annual bonus;
 - (ii) Employer's contribution to medical aid;
 - (iii) Group life insurance premiums borne by the employer;
 - (iv) Employer's contribution to a pension or provident fund; and
 - (v) All other benefits or allowances payable in terms of a letter of appointment, including any transportation allowance or company vehicle benefit, telephone and/or computer allowances, etc; and
 - (c) Amounts payable in terms of an Act, including:
 - (i) Contributions to the Compensation Fund in terms of the Compensation for Occupational Injuries and Diseases Act;
 - (ii) Contributions to unemployment insurance in terms of the Unemployment Insurance Fund Act;
 - (iii) Levies in terms of the Skills Development Levy Act, and
 - (iv) Recoverable levies to all spheres of government.

4.6 Expenses and Costs

- (1) Subject to clause 4.3(3) a consulting engineer shall recover from the client:
 - (a) All expenses actually incurred by the consulting engineer and members of the consulting engineer's staff in rendering their services; and
 - (b) All other costs incurred on behalf of and with approval of the client, plus a mark-up of 10 per cent.
- (2) Recoverable expenses include:
 - (a) Travelling expenses for the conveyance of the consulting engineer or a member of the consulting engineer's staff by means of:
 - (i) private motor transport, including any parking charges, toll fees and related expenses;
 - (ii) a scheduled airline or a train, bus, taxi or hired car; or
 - (iii) non-scheduled or privately owned air transport.
 - (b) Travelling time on the basis of the rate set out in clause 4.5, for all time spent in travelling by the consulting engineer or members of his staff shall be as follows:

- (i) when fees are paid on a time basis, all hours spent on travelling are reimbursable.
 - (ii) when fees are paid on a percentage basis, reimbursement for travelling time shall be for all time spent in travelling minus the first hour per return journey.
 - (c) Accommodation and subsistence expenses incurred by the consulting engineer or a member of his staff;
 - (d) Agreed costs of typing, production, copying and binding of contract documents, pre-qualification documents, feasibility reports, preliminary design reports, final reports and manuals, excluding general correspondence, minor reports, contractual reports, progress reports, etc.
 - (e) Expenses on special reproductions, copying, printing, artwork, binding and photography, etc. requested by the client.
 - (f) Alternatively, a lump sum or percentage of the cost of the works may be determined and agreed between the consulting engineer and the client to cater for all or any of the above.
- (3) Costs that shall be recovered under clause (1)(b) above include, but are not limited to:
- (a) Site traffic surveys;
 - (b) Geotechnical investigations;
 - (c) Laboratory testing;
 - (d) Topographical and land surveys;
 - (e) Supply of specific equipment;
 - (f) Specialist sub-consultants;
 - (g) Environmental investigations and studies; and
 - (h) Land acquisitions, expropriation, way leaves, and servitudes.

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