

**NATIONAL HOUSING PROGRAMME: The adjustment of the subsidy amount to cater for extraordinary development conditions.**



**User Manual**

**1. Groundwater**

State Y or N.(yes or no) where applicable

for example:

<b>1. GROUNDWATER</b>		<b>YOU MAY HAVE ONLY ONE "Y" IN THIS SECTION</b>	
<b>CATEGORY 1</b> - Permanent or perched water table equal to or less than 1.0m below ground level.	Y	Y	ENTER
<b>CATEGORY 2</b> - Permanent or perched water table more than 1.0 but less than 1.5m below ground level.	N	N	ENTER

**2. Erodibility of Soil**

Again just state Y or N where applicable

for example:

<b>2. ERODIBILITY OF SOIL</b>		<b>YOU MAY HAVE ONLY ONE "Y" IN THIS SECTION</b>	
<b>CATEGORY 1</b> - High risk- Erodibility index 1-8	N	N	ENTER
<b>CATEGORY 2</b> - Medium risk - Erodibility index 9-15	N	N	ENTER

**3. Hard excavation**

At some of the sections there is orange blocks. Here you must put in more specified information and not a Y/N.

for example:

<b>3. HARD EXCAVATION</b>		<b>YOU MAY COMPLETE ONLY ONE CATEGORY</b>	
<b>CATEGORY 1</b> - Hard rock excavation	10% - 100%	29	29 ENTER
<b>CATEGORY 2</b> - Boulder excavation	10% - 100%	60	60 ENTER

**4. Dolomite, 5. Expansive clays, 6. Collapsing sands, 7. Compressible soils**

**In sections 4-7 there can only be one "Y" (yes) if applicable.**

for example:

<b>4. DOLOMITE</b>		<b>*YOU MAY HAVE JUST ONE "Y" IN SECTIONS 4-7*</b>	
<b>CATEGORY 1</b> - Class P and anticipated inherent risk Class 1 and 2: Dolomite area Class D2	N	N	ENTER
<b>CATEGORY 2</b> - Class P and anticipated inherent risk Class 3, 4 and 5: Dolomite area Class D3	N	N	ENTER
<b>5. EXPANSIVE CLAYS</b>			
<b>CATEGORY 1</b> - Medium - Class H1	N	N	ENTER
<b>CATEGORY 2</b> - High - Class H2	Low PE: 5 < CDS < 20	N	N ENTER
	Medium PE: 20 < CDS < 40	N	N ENTER
<b>CATEGORY 3</b> - Very high - Class H3	High PE: 40 < CDS < 60	N	N ENTER
	Very High PE: CDS < 60	N	N ENTER
<b>6. COLLAPSING SANDS (Site Class C2)</b>			
<b>CATEGORY 1</b> - Class C1	Modified normal foundations	N	N ENTER
	Compaction below footings	N	N ENTER
<b>CATEGORY 2</b> - Class C2	Compaction below footings	N	N ENTER
	Light raft	Y	Y ENTER
	Medium raft	N	N ENTER
	Heavy raft	N	N ENTER
	Special raft	N	N ENTER
<b>7. COMPRESSIBLE SOILS (Site Class S2)</b>			
<b>CATEGORY 1</b> - Class S1	Modified normal foundations	N	N ENTER
	Compaction below footings	N	N ENTER
<b>CATEGORY 2</b> - Class S2	Light raft	N	N ENTER
	Medium raft	N	N ENTER
	Heavy raft	N	N ENTER
	Special raft	N	N ENTER

**8. Mining subsidence**

Again just state Y or N where applicable

for example:

<b>8. MINING SUBSIDENCE</b>			
<b>CATEGORY 1</b> - Old under-mining depth 90m-240m below surface	Compaction below footings	Y	Y ENTER
	Medium raft	N	N ENTER
<b>CATEGORY 2</b> - Mining within a depth of between 90m-240m below	Additional earthworks	N	N ENTER
	Soil mattress	N	N ENTER

## 9. Seismic activity

Again just state Y or N where applicable  
for example:

9. SEISMIC ACTIVITY		
CATEGORY 1 - Mining induced seismic activity >100 cm/s <sup>2</sup>	Stiffened strip footings	N N ENTER
	OR Heavy raft	Y Y ENTER
CATEGORY 2 - Natural induced seismic activity >100 cm/s <sup>2</sup>	Stiffened strip footings	N N ENTER
	OR Heavy raft	N N ENTER

## 10. Topography of the site

Again just state Y or N where applicable  
for example:

10. TOPOGRAPHY OF THE SITE		
CATEGORY 1 - Average ground slope flatter than 1:100		N N ENTER
CATEGORY 2 - Average ground slope of between 1:11 and 1:20		N N ENTER
CATEGORY 3 - Average ground slope of between 1:7.5 and 1:10		N N ENTER
CATEGORY 4 - Average ground slope of between 1:5 and 1:7.5		N N ENTER
CATEGORY 5 - Average ground slope of more than 1:5		Y Y ENTER

## 11. Southern Cape coastal condensation areas.

Again just state Y or N where applicable  
for example:

11. SOUTHERN CAPE COASTAL CONDENSATION AREAS		
Housing in the designated area is subject to severe condensation conditions.		Y Y ENTER

## 12. Location adjustment

The MEC in each Province must determine the Major Centres and the % allowance for each Major Centre

Below is suggested Major Centres and % for each Province but it can be changed by each Province

PROVINCE	MAJOR CENTRE	% ALLOWANCE ON MATERIAL COST
EASTERN CAPE	Port Elizabeth	0%
	East London	1%
	Mthatha	3%
	Queenstown	4%
	Graaff Reinet	5%
FREE STATE	Bloemfontein	0%
	Welkom	1%
	Kroonstad	2%
	Bethlehem	4%
GAUTENG	NONE	
KWA-ZULU NATAL	Durban	0%
	Pietermaritzburg	1%
	Vryheid	4%
	Richardsbay	3%
LIMPOPO	Polokwane	0%
	Bela Bela	2%
	Phalaborwa	2%
MPUMALANGA	Nelspruit	0%
	Lydenburg	1%
	Witbank/Middelburg	0%
	Ermelo	1%
NORTH WEST	Mafikeng	0%
	Klerksdorp/Potchefstroom	0%
	Rustenburg	2%
	Vryburg	2%
NORTHERN CAPE	Kimberley	0%
	Kuruman	2%
	Upington	5%
	Springbok	4%
	Calvinia	3%
	De Aar	2%
WESTERN CAPE	Cape Peninsula	0%
	Worcester	1%
	George	2%
	Vredendal	2%

### EXAMPLE: NORTHERN CAPE PROVINCE

MEC will identify Kimberley, De Aar, Kuruman, Upington, Springbok and Calvinia as major centres in the province and will then determine % allowance for material costs.

For a housing scheme in Kakamas, the location allowance will thus be 5% on the material cost. (Upington is the nearest major centre and Kakamas is 90 km from Upington).

12. LOCATION ADJUSTMENT		
Major Centre	Upington	UPINGTON ENTER
Distance from identified major centre	90	90 ENTER
% allowance on material cost	5	5 ENTER

**13. Physical disabilities and the special housing needs.**

Again just state Y or N where applicable  
for example:

13. PHYSICAL DISABILITIES AND SPECIAL HOUSING NEEDS		
CATEGORY A -	Needs walking aids	N N ENTER
CATEGORY B -	Partial usage of wheel chair.	Y Y ENTER
CATEGORY C -	Full-time usage of wheel chair.	N N ENTER
CATEGORY D -	Partially/profoundly deaf	N N ENTER
CATEGORY E -	Partially/totally blind.	N N ENTER
CATEGORY F -	Partially/ total movement loss/paralysis in the uper body limbs.	N N ENTER

Type in the number of houses that fit the decriptions above.  
for example:

**Number of houses:**  30 ENTER

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**Questionnaire**

Name of project:

Project number:

ERF NRS:

		Size of House
<b>1. GROUNDWATER</b> YOU MAY HAVE ONLY ONE "Y" IN THIS SECTION		
CATEGORY 1 - Permanent or perched water table equal to or less than 1.0m below ground level.		
CATEGORY 2 - Permanent or perched water table more than 1.0 but less than 1.5m below ground level.		
<b>2. ERODIBILITY OF SOIL</b> YOU MAY HAVE ONLY ONE "Y" IN THIS SECTION		
CATEGORY 1 - High risk- Erodibility index 1-8		
CATEGORY 2 - Medium risk - Erodibility index 9-15		
<b>3. HARD EXCAVATION</b> YOU MAY COMPLETE ONLY CATEGORY		
CATEGORY 1 - Hard rock excavation 10% - 100%		
CATEGORY 2 - Boulder excavation 10% - 100%		
<b>4. DOLOMITE (Site Class D)</b> *YOU MAY HAVE ONLY ONE "Y" IN SECTIONS 4-7*		
CATEGORY 1 - Class P and anticipated inherent risk Class 1 and 2; Dolomite area Class D2		
CATEGORY 2 - Class P and anticipated inherent risk Class 3, 4 and 5; Dolomite area Class D3		
<b>5. EXPANSIVE CLAYS (Site Class H)</b> *YOU MAY HAVE ONLY ONE "Y" IN SECTIONS 4-7*		
CATEGORY 1 - Medium - Class H1		
CATEGORY 2 - High - Class H2		
Low PE: 5 < CDS < 20 OR Medium PE: 20 < CDS < 40		
CATEGORY 3 - Very high - Class H3		
High PE: 40 < CDS < 60 OR Very High PE: CDS < 60		
<b>6. COLLAPSING SANDS (Site Class C)</b> *YOU MAY HAVE ONLY ONE "Y" IN SECTIONS 4-7*		
CATEGORY 1 - Class C1		
Modified normal foundations OR Compaction below footings		
CATEGORY 2 - Class C2		
Compaction below footings OR Light raft OR Medium raft OR Heavy raft OR Special raft		
<b>7. COMPRESSIBLE SOILS (Site Class S)</b> *YOU MAY HAVE ONLY ONE "Y" IN SECTIONS 4-7*		
CATEGORY 1 - Class S1		
Modified normal foundations OR Compaction below footings		
CATEGORY 2 - Class S2		
Light raft OR Medium raft OR Heavy raft OR Special raft		
<b>8. MINING SUBSIDENCE</b> YOU MAY HAVE ONLY ONE "Y" IN THIS SECTION		
CATEGORY 1 - Old under-mining depth 90m-240m below surface		
Compaction below footings OR Medium raft		
CATEGORY 2 - Mining within a depth of between 90m-240m below surface		
Additional earthworks OR Soil mattress		
<b>9. SEISMIC ACTIVITY</b> YOU MAY HAVE ONLY ONE "Y" IN THIS SECTION		
CATEGORY 1 - Mining induced seismic activity >100 cm/s <sup>2</sup>		
Stiffened strip footings OR Heavy raft		
CATEGORY 2 - Natural induced seismic activity >100 cm/s <sup>2</sup>		
Stiffened strip footings OR Heavy raft		
<b>10. TOPOGRAPHY OF THE SITE</b> YOU MAY HAVE ONLY ONE "Y" IN THIS SECTION		
CATEGORY 1 - Average ground slope flatter than 1:100		
CATEGORY 2 - Average ground slope of between 1:11 and 1:20		
CATEGORY 3 - Average ground slope of between 1:7.5 and 1:10		
CATEGORY 4 - Average ground slope of between 1:5 and 1:7.5		
CATEGORY 5 - Average ground slope of more than 1:5		
<b>11. SOUTHERN CAPE COASTAL CONDENSATION AREAS</b>		
Housing in the designated area is subject to severe condensation conditions.		
<b>12. LOCATION ADJUSTMENT</b>		
Major Centre		
Distance from identified major centre (measured in ONE direction)		
% allowance on material cost		
<b>13. PHYSICAL DISABILITIES AND SPECIAL HOUSING NEEDS</b>		
CATEGORY A- Needs walking aids		
CATEGORY B - Partial usage of wheel chair.		
CATEGORY C - Full-time usage of wheel chair.		
CATEGORY D- Partially/profoundly deaf		
CATEGORY E- Partially/totally blind.		
CATEGORY F - Partially/ total movement loss/paralysis in the upper body limbs.		

Number of houses:

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**Calculation Sheet 6 December 2012**

		SIZE OF HOUSE	
<b>1</b>	<b>Groundwater</b>		R -
1.1	<b>CATEGORY 1: Water table equal to or less than 1,0m</b>		
	Sub-Surface drainage		H
	Plus Improved damp proofing to houses	0	H
	Plus Dewatering of service trenches during construction	0	E
1.2	<b>CATEGORY 2: Water table more than 1,0m but less than 1,5m</b>		
	Dewatering of service trenches during construction.	0	E
<b>2</b>	<b>Erodibility of soil</b>		R -
2.1	<b>CATEGORY 1: High Risk</b>		
	Retaining walls	0	H
	Plus Earthworks to reduce slopes	0	H
	Plus Surface Drainage	0	E
2.2	<b>CATEGORY 2: Medium Risk</b>		
	Provision of retaining walls	0	H
	Plus Earthworks to reduce slopes	0	H
<b>3</b>	<b>Hard Excavation</b>		R -
3.1	<b>CATEGORY 1: Hard Rock Excavation</b> 10%-100%		
	Additional cost of trench excavation		E
3.2	<b>CATEGORY 2: Boulder Excavation</b>		
	Additional cost of trench excavation 10%-100%	0	E
	Additional cost of road excavation 10%-100%	0	E
<b>4</b>	<b>Dolomite (Site Class D)</b>		R -
4.1	<b>CATEGORY 1: Class P and Risk Class 1 &amp; 2</b>		
	Design and construction of township services	0	E
	Additional cost of foundations: Light Raft	0	H
4.2	<b>CATEGORY 2: Class P and Risk Class 3, 4 &amp; 5</b>		
	Design and construction of township services	0	E
	Additional cost of foundations where sinkholes may occur: Light Raft	0	H
<b>5</b>	<b>Expansive clays (Site Class H)</b>		R -
5.1	<b>CATEGORY 1: Medium Potential Expansiveness</b>		
	Modified normal foundations	0	H
5.2	<b>CATEGORY 2: High Potential Expansiveness</b>		
	Light raft (low PE 5<CDS<20)	0	H
	Medium raft (medium PE 20<CDS<40)	0	H
5.3	<b>CATEGORY 3: Very High Potential Expansiveness</b>		
	Heavy raft (PE 40<CDS<60)	0	H
	Special raft (v high PE & CDS>60)	0	H
<b>6</b>	<b>Collapsing Sands (Site Class C)</b>		R -
6.1	<b>CATEGORY 1: Class C1:</b>		
	Modified normal	0	H
	Or compaction below footings	0	H
6.2	<b>CATEGORY 2: Class C2:</b>		
	Compaction below footings	0	H
	Or Light raft (collapse potential 1-5%)	0	H
	Or Medium raft (collapse potential 5-10%)	0	H
	Or Heavy raft (collapse potential 10-20%)	0	H
	Or Special raft (collapse potential > 20%)	0	H
<b>7</b>	<b>Compressible soils (Site Class S)</b>		R -
7.1	<b>CATEGORY 1: Class S1</b>		
	Modified normal	0	H
	Or Compaction below footings	0	H
7.2	<b>CATEGORY 2: Class S2</b>		
	Or Light raft (consolidation potential 1-5%)	0	H
	Or Medium raft (consolidation potential 5-10%)	0	H
	Or Heavy raft (consolidation potential 10-20%)	0	H
	Or Special raft (consolidation potential > 20%)	0	H
<b>8</b>	<b>Mining Subsidence</b>		R -
8.1	<b>CATEGORY 1: Old undermining (90 - 240m below surface)</b>		
	Compaction below footings	0	H
	Or Medium raft (consolidation potential 5-10%)	0	H
8.2	<b>CATEGORY 2: Mining (90 - 240m below surface)</b>		
	Additional earthworks to fill open outcrop	0	H
	Or soil mattress	0	H
<b>9</b>	<b>Seismic Activity</b>		R -
9.1	<b>CATEGORY 1: Mining induced seismic activity</b>		
	Stiffened strip footings	0	H
	Or Heavy raft	0	H
9.2	<b>CATEGORY 2: Natural seismic activity</b>		
	Stiffened strip footings	0	H
	Or Heavy raft	0	H

<b>10</b>	<b>Topography of the site</b>	R	-	
<b>10.1</b>	<b>CATEGORY 1: Flatter than 1:100</b>			
	Increase depth of sewer trenches		0	E
	Provision of pumpstations		0	E
<b>10.2</b>	<b>CATEGORY 2: Slope between 1:10 and 1:20</b>			
	Terracing for houses		0	H
	Additional earthworks to roads		0	E
	Stormwater control measures		0	E
<b>10.3</b>	<b>CATEGORY 3: Slope between 1:7.5 and 1:10</b>			
	Terracing for houses			H
	Additional earthworks to roads		0	E
	Stormwater control measures		0	E
<b>10.4</b>	<b>CATEGORY 4: Slope between 1:5 and 1:7.5</b>			
	Terracing for houses		0	H
	Additional earthworks to roads		0	E
	Stormwater control measures		0	E
<b>10.5</b>	<b>CATEGORY 5: Slope more than 1 : 5</b>			
	Terracing for houses		0	H
	Additional earthworks to roads		0	E
	Stormwater control measures		0	E
<b>11</b>	<b>Southern Cape Coastal Condensation Areas</b>	R	-	
	Plaster and paint on all external walls		0	H
	6.4mm gypsum plasterboard ceilings		0	H
	80mm thick glass fibre insulation		0	H
<b>12</b>	<b>Location adjustment</b>	R	-	
	Kilometer Location Adjustment		0	H
	% Location adjustment		0	H
<b>13</b>	<b>Physical disabilities and the special housing needs</b>	R	-	
<b>13.1</b>	<b>CATEGORY A: Needs walking aids</b>			
	Access to house(12m <sup>2</sup> paving, and ramp at doorway		0	H
	Kick plates to doors		0	H
	Hand and Grab rails		0	H
	Lever action taps		0	H
	1 m vinyl folding door in bathroom		0	H
	Increase size of bathroom(reduce other rooms)		0	H
<b>13.2</b>	<b>CATEGORY B: Partial usage of wheel chair</b>			
	Access to house(12m <sup>2</sup> paving, and ramp at doorway		0	H
	Kick plates to doors		0	H
	Hand rails and grab rails		0	H
	Lever action taps		0	H
	1 m vinyl folding door in bathroom		0	H
	Increase size of bathroom(reduce other rooms)		0	H
<b>13.3</b>	<b>CATEGORY C: Full-time usage of wheel chair</b>			
	Access to house(12m <sup>2</sup> paving, and ramp at doorway		0	H
	Kick plates to doors		0	H
	Hand and Grab rails		0	H
	Lever action taps		0	H
	1 m vinyl folding door in bathroom		0	H
	Increase size of bathroom(reduce other rooms)		0	H
<b>13.4</b>	<b>CATEGORY D: Partially/profoundly deaf</b>			
	Visual doorbell indicator		0	H
<b>13.5</b>	<b>CATEGORY E: Partially/totally blind</b>			
	Access to house(12m <sup>2</sup> paving, and ramp at doorway		0	H
	Kick plates to doors		0	H
	Hand and Grab rails		0	H
	Lever action taps		0	H
	1 m vinyl folding door in bathroom		0	H
	Slip resistant flooring		0	H
	Colour contrast on doorways, stairs, corners of buildings and skirting on walls.		0	H
<b>13.6</b>	<b>CATEGORY F: Partially/total movement loss in upper body limbs</b>			
	Access to house(12m <sup>2</sup> paving, and ramp at doorway		0	H
	Kick plates to doors		0	H
	Hand and Grab rails		0	H
	Lever action taps		0	H
	1 m vinyl folding door in bathroom		0	H
	Slip resistant flooring		0	H
	Increase size of bathroom(reduce other rooms)		0	H
<b>14</b>	<b>ADDITIONAL PROFESSIONAL FEES</b>	R	-	
<b>TOTAL SUBSIDY VARIATION</b>		R	-	
<b>TOTAL SUBSIDY VARIATION PER HOUSE</b>			#DIV/0!	
<b>SUBSIDY VARIATION FOR INFRASTRUCTURE PER ERF</b>		R	-	
<b>SUBSIDY VARIATION FOR HOUSE PER ERF</b>		R	-	