

Subject	Successive Estimation								Date	01-10-2010		
Project	Test								Respons.	JSI		
	Step 1								Size, m2	4920,6		
				min.	unit prices			max			Standard	
Pos.	Item	unit	quantity	% of prob.	min	prob.	max.	% of prob.	average	total	deviation	Variance
1	Building site	m2	3500,00	50,00%	350	700	1.050	150,00%	700	2.450.000	490	240.100
2	Main elements	m2	3435,00	80,00%	2.800	3500	5.250	150,00%	3.710	12.743.850	1.683	2.832.994
3	Extension	m2	99,00	75,00%	7.875	10500	13.125	125,00%	10.500	1.039.500	104	10.806
4	Penthouse	m2	307,95	85,00%	10.753	12650	13.915	110,00%	12.524	3.856.612	195	37.939
5	Services renewal	m2	4920,60	80,00%	896	1120	1.456	130,00%	1.142	5.621.293	551	303.719
6	Finishings	m2	4920,60	90,00%	2.160	2400	2.640	110,00%	2.400	11.809.440	472	223.141
7	Demolition	m2	3435,00	85,00%	234	275	344	125,00%	281	963.518	76	5.711
	Total									38.484.213		3.654.409
								Estimate		38.484.213		
								Uncertainty, +/-		3.823.302		
								Uncertainty, %		9,9%		
								Price per m2		7821,040679		

Subject	Successive Estimation								Date	01-10-2010		
Project	Test								Respons.	JSI		
	Step 2								Size, m2	4920,60		
				min.	unit prices			max			Standard	
Pos.	Item	unit	quantity	% of prob.	min	prob.	max.	% of prob.	average	total	deviation	Variance
1	Building site	m2	3500,00	50,00%	350	700	1.050	150,00%	700	2.450.000	490	240.100
2	Main elements				-		-		-	-	-	-
2.1	External walls	m2	2636,20	75,00%	1.013	1350	1.755	130,00%	1.364	3.594.459	391	153.253
2.2	Staircases/lifts	pcs	3,00	80,00%	440.000	550000	660.000	120,00%	550.000	1.650.000	132	17.424
2.3	Roof terrace	m2	528,05	90,00%	891	990	1.139	115,00%	1.000	527.997	26	683
2.4	Floors	m2	3435,00	90,00%	540	600	660	110,00%	600	2.061.000	82	6.796
2.5	Inner walls	m2	3435,00	85,00%	298	350	403	115,00%	350	1.202.250	72	5.203
3	Extension	m2	99,00	75,00%	7.875	10500	13.125	125,00%	10.500	1.039.500	104	10.806
4	Penthouse	m2	307,95	85,00%	10.753	12650	13.915	110,00%	12.524	3.856.612	195	37.939
5	Services renewal	m2	4920,60	80,00%	896	1120	1.456	130,00%	1.142	5.621.293	551	303.719
6	Finishings	m2	4920,60	90,00%	2.160	2400	2.640	110,00%	2.400	11.809.440	472	223.141
7	Demolition	m2	3435,00	85,00%	234	275	344	125,00%	281	963.518	76	5.711
	Total									34.776.069		1.004.775
							Estimate			34.776.069		
							Uncertainty, +/-			2.004.769		
							Uncertainty, %			5,8%		
							Price per m2			7067,444755		

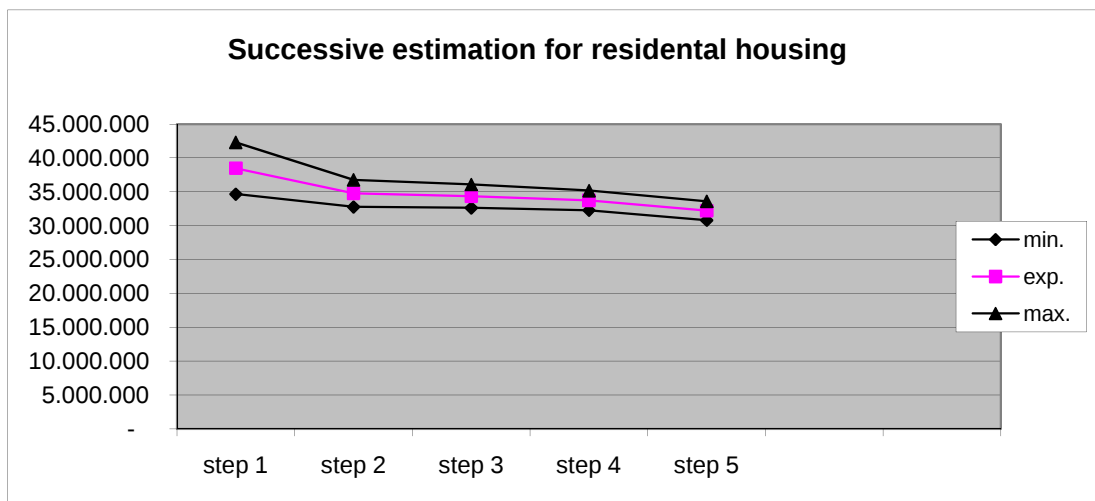
Subject	Successive Estimation								Date	01-10-2010		
Project	Test								Respons.	JSI		
	Step 3								Size, m2	4920,60		
				min.	unit prices			max			Standard	
Pos.	Item	unit	quantity	% of prob.	min	prob.	max.	% of prob.	average	total	deviation	Variance
1	Building site	m2	3500,00	50,00%	350	700	1.050	150,00%	700	2.450.000	490	240.100
2	Main elements				-		-		-	-	-	-
2.1	External walls	m2	2636,20	75,00%	1.013	1350	1.755	130,00%	1.364	3.594.459	391	153.253
2.2	Staircases/lifts	pcs	3,00	80,00%	440.000	550000	660.000	120,00%	550.000	1.650.000	132	17.424
2.3	Roof terrace	m2	528,05	90,00%	891	990	1.139	115,00%	1.000	527.997	26	683
2.4	Floors	m2	3435,00	90,00%	540	600	660	110,00%	600	2.061.000	82	6.796
2.5	Inner walls	m2	3435,00	85,00%	298	350	403	115,00%	350	1.202.250	72	5.203
3	Extension	m2	99,00	75,00%	7.875	10500	13.125	125,00%	10.500	1.039.500	104	10.806
4	Penthouse	m2	307,95	85,00%	10.753	12650	13.915	110,00%	12.524	3.856.612	195	37.939
5	Services renewal	m2			-		-		-	-	-	-
5.1	Heating system	m2	4920,60	90,00%	306	340	374	110,00%	340	1.673.004	67	4.478
5.2	Plumbing	m2	4920,60	85,00%	468	550	660	120,00%	556	2.733.393	189	35.889
5.3	Sewage	m2	4920,60	85,00%	111	130	156	120,00%	131	646.075	45	2.005
5.4	Ventilation	m2	4920,60	85,00%	26	30	36	120,00%	30	149.094	10	107
6	Finishings	m2	4920,60	90,00%	2.160	2400	2.640	110,00%	2.400	11.809.440	472	223.141
7	Demolition	m2	3435,00	85,00%	234	275	344	125,00%	281	963.518	76	5.711
	Total									34.356.341		743.535
							Estimate			34.356.341		
							Uncertainty, +/-			1.724.569		
							Uncertainty, %			5,0%		
							Price per m2			6982,144755		

Subject	Successive Estimation								Date	01-10-2010		
Project	Test								Respons.	JSI		
	Step 4								Size, m2	4920,60		
Pos.	Item	unit	quantity	min. % of prob.	unit prices			max % of prob.	average	total	Standard deviation	Variance
1	Building site	m2			-		-		-	-	-	-
1.1	Fence	m	250,00	99,00%	297	300	303	101,00%	300	75.000	0	0
1.2	Sheds	months	6,00	50,00%	6.000	12000	18.000	150,00%	12.000	72.000	14	207
1.3	Steel open containers	months	6,00	50,00%	2.500	5000	7.500	150,00%	5.000	30.000	6	36
1.4	Storage containers	months	6,00	50,00%	2.500	5000	7.500	150,00%	5.000	30.000	6	36
1.5	Scaffolding	pcs	1,00	50,00%	75.000	150000	165.000	110,00%	138.000	138.000	18	324
1.6	Crane	months	3,00	50,00%	82.500	165000	247.500	150,00%	165.000	495.000	99	9.801
1.7	Electric supply	months	6,00	50,00%	25.000	50000	75.000	150,00%	50.000	300.000	60	3.600
1.8	Temporary plumbing	months	6,00	50,00%	3.000	6000	9.000	150,00%	6.000	36.000	7	52
1.9	Temporary sewage	months	6,00	50,00%	3.000	6000	9.000	150,00%	6.000	36.000	7	52
1.10	Winter measures	months	6,00	50,00%	30.000	60000	90.000	150,00%	60.000	360.000	72	5.184
1.11	Workforce equipment	months	6,00	50,00%	6.000	12000	18.000	150,00%	12.000	72.000	14	207
1.12	Safety measure	months	6,00	50,00%	15.000	30000	45.000	150,00%	30.000	180.000	36	1.296
2	Main elements				-		-		-	-	-	-
2.1	External walls	m2	2636,20	75,00%	1.013	1350	1.755	130,00%	1.364	3.594.459	391	153.253
2.2	Staircases/lifts	pcs	3,00	80,00%	440.000	550000	660.000	120,00%	550.000	1.650.000	132	17.424
2.3	Roof terrace	m2	528,05	90,00%	891	990	1.139	115,00%	1.000	527.997	26	683
2.4	Floors	m2	3435,00	90,00%	540	600	660	110,00%	600	2.061.000	82	6.796
2.5	Inner walls	m2	3435,00	85,00%	298	350	403	115,00%	350	1.202.250	72	5.203
3	Extension	m2	99,00	75,00%	7.875	10500	13.125	125,00%	10.500	1.039.500	104	10.806
4	Penthouse	m2	307,95	85,00%	10.753	12650	13.915	110,00%	12.524	3.856.612	195	37.939
5	Services renewal	m2			-		-		-	-	-	-
5.1	Heating system	m2	4920,60	90,00%	306	340	374	110,00%	340	1.673.004	67	4.478
5.2	Plumbing	m2	4920,60	85,00%	468	550	660	120,00%	556	2.733.393	189	35.889
5.3	Sewage	m2	4920,60	85,00%	111	130	156	120,00%	131	646.075	45	2.005
5.4	Ventilation	m2	4920,60	85,00%	26	30	36	120,00%	30	149.094	10	107
6	Finishings	m2	4920,60	90,00%	2.160	2400	2.640	110,00%	2.400	11.809.440	472	223.141
7	Demolition	m2	3435,00	85,00%	234	275	344	125,00%	281	963.518	76	5.711
	Total									33.730.341		524.230
							Estimate			33.730.341		
							Uncertainty, +/-			1.448.075		
							Uncertainty, %			4,3%		
							Price per m2			6854,924497		

Subject	Successive Estimation									Date	01-10-2010			
Project	Test										Respons.	JSI		
Step 4											Size, m2	4920,60		
Pos.	Item	unit	quantity	% of prob.	unit prices			max	% of prob.	average	total	Standard deviation	Variance	
					min	prob.	max.							
1	Building site	m2			-		-			-	-	-	-	
1.1	Fence	m	250,00	99,00%	297	300	303	101,00%	300	75.000	0	0		
1.2	Sheds	months	6,00	50,00%	6.000	12000	18.000	150,00%	12.000	72.000	14	207		
1.3	Steel open containers	months	6,00	50,00%	2.500	5000	7.500	150,00%	5.000	30.000	6	36		
1.4	Storage containers	months	6,00	50,00%	2.500	5000	7.500	150,00%	5.000	30.000	6	36		
1.5	Scaffolding	pcs	1,00	50,00%	75.000	150000	165.000	110,00%	138.000	138.000	18	324		
1.6	Crane	months	3,00	50,00%	82.500	165000	247.500	150,00%	165.000	495.000	99	9.801		
1.7	Electric supply	months	6,00	50,00%	25.000	50000	75.000	150,00%	50.000	300.000	60	3.600		
1.8	Temporary plumbing	months	6,00	50,00%	3.000	6000	9.000	150,00%	6.000	36.000	7	52		
1.9	Temporary sewage	months	6,00	50,00%	3.000	6000	9.000	150,00%	6.000	36.000	7	52		
1.10	Winter measures	months	6,00	50,00%	30.000	60000	90.000	150,00%	60.000	360.000	72	5.184		
1.11	Workforce equipment	months	6,00	50,00%	6.000	12000	18.000	150,00%	12.000	72.000	14	207		
1.12	Safety measure	months	6,00	50,00%	15.000	30000	45.000	150,00%	30.000	180.000	36	1.296		
2	Main elements				-		-			-	-	-	-	
2.1	External walls	m2	2636,20	75,00%	1.013	1350	1.755	130,00%	1.364	3.594.459	391	153.253		
2.2	Staircases/lifts	pcs	3,00	80,00%	440.000	550000	660.000	120,00%	550.000	1.650.000	132	17.424		
2.3	Roof terrace	m2	528,05	90,00%	891	990	1.139	115,00%	1.000	527.997	26	683		
2.4	Floors	m2	3435,00	90,00%	540	600	660	110,00%	600	2.061.000	82	6.796		
2.5	Inner walls	m2	3435,00	85,00%	298	350	403	115,00%	350	1.202.250	72	5.203		
3	Extension	m2	99,00	75,00%	7.875	10500	13.125	125,00%	10.500	1.039.500	104	10.806		
4	Penthouse				-		-			-	-	-	-	
4.1	Roof				-		-			-	-	-	-	
	Ceiling	m²	308,25	90,00%	434	482	530	110%	482	148.577	6	35		
	Steel trapezoidal profile	m²	330	90,00%	236	262	288	110%	262	86.460	3	12		
	Vapour barrier	m²	330	90,00%	226	251	276	110%	251	82.830	3	11		
	Isolation (230 mm)	m²	330	90,00%	460	511	562	110%	511	168.630	7	45		
	Building paper	m²	308,25	90,00%	316	351	386	110%	351	108.196	4	19		
	Aluminium sheet	m²	308,25	90,00%	149	165	182	110%	165	50.861	2	4		
4.2	Structure				-		-			-	-	-	-	
	HEB 200 (63kg/m)	kg	10584	85,00%	26	30	35	115%	30	317.520	19	363		
4.3	External wall (prefabricated panels)				-		-			-	-	-	-	
	Gypsum plasterboard	m²	447	95,00%	102	107	112	105%	107	47.829	1	1		
	Vapour barrier	m²	447	95,00%	191	201	211	105%	201	89.847	2	3		
	Rockwool isolation (160 mm)	m²	447	95,00%	430	453	476	105%	453	202.491	4	16		
	Timber framing 160 x 40 mm.	m	918	95,00%	286	301	316	105%	301	276.318	6	31		
	Oriented Strand Board (OSB)	m²	447	95,00%	428	450	473	105%	450	201.150	4	16		
	Plastic windproof laminate	m²	447	95,00%	17	17,6	18	105%	18	7.867	0	0		
	Batten 40 x 40 mm.	m.	918	95,00%	58	61	64	105%	61	55.998	1	1		
	Wooden panels	m²	447	95,00%	238	250	263	105%	250	111.750	2	5		
4.4	Inner walls				-		-			-	-	-	-	
	Gypsum plasterboard (including profiles)	m²	333	95,00%	115	121	127	105%	121	40.293	1	1		
	Gypsum plasterboard (incl prof)_between ap.	m²	198	95,00%	183	193	203	105%	193	38.214	1	1		
	Rockwool isolation (120 mm)	m²	99	95,00%	148	156	164	105%	156	15.444	0	0		
4.5	Floor				-		-			-	-	-	-	
	Polyethylene sheet	m²	270	95,00%	48	50	53	105%	50	13.500	0	0		
	Battens 47 x 50 mm. s/ 420 mm	m.	270	95,00%	29	31	33	105%	31	8.370	0	0		
	Rockwool isolation (45mm)	m²	270	95,00%	125	132	139	105%	132	35.640	1	1		
	Laminated parquet	m²	270	95,00%	789	830	872	105%	830	224.100	4	20		
5	Services renewal				-		-			-	-	-	-	
5.1	Heating system	m2	4920,60	90,00%	306	340	374	110,00%	340	1.673.004	67	4.478		
5.2	Plumbing	m2	4920,60	85,00%	468	550	660	120,00%	556	2.733.393	189	35.889		
5.3	Sewage	m2	4920,60	85,00%	111	130	156	120,00%	131	646.075	45	2.005		
5.4	Ventilation	m2	4920,60	85,00%	26	30	36	120,00%	30	149.094	10	107		
6	Finishings	m2	4920,60	90,00%	2.160	2400	2.640	110,00%	2.400	11.809.440	472	223.141		
7	Demolition	m2	3435,00	85,00%	234	275	344	125,00%	281	963.518	76	5.711		
Total										32.205.614		486.877		

Estimate	32.205.614
Uncertainty, +/-	1.395.531
Uncertainty, %	4,3%
Price per m2	6545,058398

	min.	exp.	max.
step 1	34.660.911	38.484.213	42.307.514
step 2	32.771.299	34.776.069	36.780.838
step 3	32.631.772	34.356.341	36.080.911
step 4	32.282.267	33.730.341	35.178.416
step 5	30.810.083	32.205.614	33.601.145



Fee calculation
Group 5

Total price excl. VAT:		32205614
Architect fee	8%	2576449,12
Engineer fee	7%	2254392,98

Division of fee	%	DKK Arch. Excl VAT	DKK Arch. Incl. VAT	DKK Eng. Excl VAT	DKK Eng. Incl. VAT	Hours Architect	Hours Engineer
Outline Proposal	15%	386467,368	483084,21	338158,95	422698,6838	896,3	784,2
Scheme Design	15%	386467,368	483084,21	338158,95	422698,6838	896,3	784,2