

Calculation of manhours							
Pos.: 12.1				Name	María García Lloris		
				Date	December 2013		
				Case	Vejlevej 19		
		Activity:	waste water pipes	Reference:	kav-5031		
				Ø 110 plastic pipe			
Calc. Quant.:	61,30	m					
Guiding time:						7,60	min/m
				add./red.			
		Add. Small quant.		10%		0,76	
				Total		8,36	
conditions:		Difficulty of the work		20%		1,67	
		Volume		OK	0%	0,00	
		Weather / season	Winter	20%		1,67	
		distance	0	10%		0,84	
		Other	No	0%		0,00	
			Total			12,54	
Workrelated allowance:							
		Scaffolding	No	0%		0,00	
		Other	No	0%		0,00	
		Total				12,54	min/m

RØRLÆGNING		Grundtid min./lsm.					
Rørdimension i cm		arbejdsjak på 2 mand			arbejdsjak på 3 mand		
diameter	længde	dybde af grav i m			dybde af grav i m		
		0-1,7	1,7-3,4	3,4-5,1	0-1,7	1,7-3,4	3,4-5,1
15	100 125	7,6	8,3	9,1	7,8	9,9	12,1
20 - 25	100 125	8,2	8,9	9,5	8,3	10,1	12,4
30 - 40	200				9,4	11,1	12,8
50 - 60	200				11,5	12,5	13,6
70 - 80	200				13,6	13,9	14,4
Flytte og opstille taser (udover morgen og aften)						48 min. pr. gang	

VEND

Calculation of manhours								
Pos.: 12.2				Name	María García Lloris			
				Date	December 2013			
				Case	Vejlevej 19			
		Activity:	rain pipes	Reference:	kav-5031			
				Ø 110 plastic pipe				
Calc. Quant.:	114,68	m						
Guiding time:								7,60
					add./red.			
			Add. Small quant.		10%			0,76
				Total				8,36
conditions:			Difficulty of the work		20%			1,67
			Volume	OK	0%			0,00
			Weather / season	Winter	20%			1,67
			distance	0	10%			0,84
			Other	No	0%			0,00
				Total				12,54
Workrelated allowance:								
			Scaffolding	No	0%			0,00
			Other	No	0%			0,00
			Total					12,54 min/m

Calculation of manhours							
Pos.: 12.3				Name	María García Lloris		
				Date	December 2013		
				Case	Vejlevej 19		
			drainage foundation pipes	Reference:	kav-5031		
		Activity:					
Calc. Quant.:	190,81	m					
Guiding time:						7,60	min/m
					add./red.		
			Add. Small quant.		10%	0,76	
				Total		8,36	
conditions:			Difficulty of the work		20%	1,67	
			Volume	OK	0%	0,00	
			Weather / season	Winter	20%	1,67	
			distance	0	10%	0,84	
			Other	No	0%	0,00	
				Total		12,54	
Workrelated allowance:							
			Scaffolding	No	0%	0,00	
			Other	No	0%	0,00	
			Total			12,54	min/m

Calculation of manhours						
Pos.: 12.4				Name	María García Lloris	
				Date	December 2013	
				Case	Vejlevej 19	
		Activity:	wells	Reference:	kav-5031	
Calc. Quant.:	5 units					
Guiding time:					50,00	min/unit
				add./red.		
		Add. Small quant.		5%	2,50	
				Total	52,50	
conditions:		Difficulty of the work		20%	1,67	
		Volume	OK	0%	0,00	
		Weather / season	Winter	20%	1,67	
		distance	0	5%	0,42	
		Other	No	0%	0,00	
			Total		56,26	
Workrelated allowance:						
		Scaffolding	No	0%	0,00	
		Other	No	0%	0,00	

			Total					56,26	min/unit
--	--	--	-------	--	--	--	--	-------	----------

Calculation of manhours									
Pos.: 13.5					Name	María García Lloris			
					Date	December 2013			
					Case	Vejlevej 19			
		Activity:	drainage grates	Reference:	kav-5031				
Calc. Quant.:	12	units							
Guiding time:								50,00	min/unit
					add./red.				
			Add. Small quant.		5%			2,50	
				Total				52,50	
conditions:			Difficulty of the work		20%			1,67	
			Volume	OK	0%			0,00	
			Weather / season	Winter	20%			1,67	
			distance	0	5%			0,42	
			Other	No	0%			0,00	
				Total				56,26	
Workrelated allowance:									
			Scaffolding	No	0%			0,00	

			Scaffolding	No	0%		0,00
			Other	No	0%		0,00
			Total				56,26 min/unit

Calculation of manhours							
Pos.:				Name			
				Date			
				Case			
		Activity:		Reference:			
Calc. Quant.:							
Guiding time:							0,00
					add./red.		
			Add. Small quant.		0%		0,00
				Total			0,00
conditions:			Difficulty of the work		0%		0,00
			Volume	OK	0%		0,00
			Weather / season	Winter	0%		0,00
			distance	0	0%		0,00
			Other	No	0%		0,00
				Total			0,00

			Weather / season	Winter	0%		0,00
			distance	0	0%		0,00
			Other	No	0%		0,00
				Total			0,00
Workrelated allowance:							
			Scaffolding	No	0%		0,00
			Other	No	0%		0,00
			Total				0,00

Calculation of manhours							
Pos.:				Name			
				Date			
				Case			
		Activity:		Reference:			
Calc. Quant.:							
Guiding time:							0,00
					add./red.		
			Add. Small quant.		0%		0,00
				Total			0,00
conditions:			Difficulty of the work		0%		0,00

			Volume		OK	0%		0,00	
			Weather / season		Winter	0%		0,00	
			distance		0	0%		0,00	
			Other		No	0%		0,00	
					Total			0,00	
Workrelated allowance:									
			Scaffolding		No	0%		0,00	
			Other		No	0%		0,00	
			Total					0,00	

Calculation of manhours									
Pos.:					Name				
					Date				
					Case				
		Activity:			Reference:				
Calc. Quant.:									
Guiding time:								0,00	
						<i>add./red.</i>			
			Add. Small quant.			0%		0,00	
					Total			0,00	

conditions:		Difficulty of the work			0%			0,00	
		Volume		OK	0%			0,00	
		Weather / season		Winter	0%			0,00	
		distance		0	0%			0,00	
		Other		No	0%			0,00	
				Total				0,00	
Workrelated allowance:									
		Scaffolding		No	0%			0,00	
		Other		No	0%			0,00	
		Total						0,00	

Calculation of manhours									
Pos.:					Name				
					Date				
					Case				
		Activity:			Reference:				
Calc. Quant.:									
Guiding time:								0,00	
					add./red.				

			Add. Small quant.		0%		0,00
					Total		0,00
conditions:			Difficulty of the work		0%		0,00
			Volume	OK	0%		0,00
			Weather / season	Winter	0%		0,00
			distance	0	0%		0,00
			Other	No	0%		0,00
					Total		0,00
Workrelated allowance:							
			Scaffolding	No	0%		0,00
			Other	No	0%		0,00
			Total				0,00

Calculation of manhours						
Pos.:					Name	
					Date	
					Case	
		Activity:		Reference:		
Calc. Quant.:						
Guiding time:						0,00
					add./red.	
			Add. Small quant.		0%	0,00
				Total		0,00
conditions:			Difficulty of the work		0%	0,00
			Volume	OK	0%	0,00
			Weather / season	Winter	0%	0,00
			distance	0	0%	0,00
			Other	No	0%	0,00
				Total		0,00
Workrelated allowance:						
			Scaffolding	No	0%	0,00
			Other	No	0%	0,00
			Total			0,00

Calculation of manhours								
Pos.:					Name			
					Date			
					Case			
		Activity:		Reference:				
Calc. Quant.:								
Guiding time:								0,00
					add./red.			
			Add. Small quant.		0%			0,00
				Total				0,00
conditions:			Difficulty of the work		0%			0,00
			Volume	OK	0%			0,00
			Weather / season	Winter	0%			0,00
			distance	0	0%			0,00
			Other	No	0%			0,00
				Total				0,00
Workrelated allowance:								
			Scaffolding	No	0%			0,00
			Other	No	0%			0,00
			Total					0,00

			Other		No	0%		0,00
			Total					8,87

Blinding layer

mh/m²	
Casting of blinding layer	0,07-0,15

Calculation of manhours								
Pos.:				Name	María García Lloris			
				Date	December 2013			
				Case	Vejlevej 19			
		Activity:	Formworks	Reference:	Drawings			
			FOUNDATION					
Calc. Quant.:	196,31	m2						
Guiding time:		1			mh/m2			60,00
					add./red.			
			Add. Small quant.		5%			3,00
				Total				63,00
conditions:			Difficulty of the work		20%			12,60
			Volume	OK	0%			0,00
			Weather / season	Winter	20%			12,60
			distance	0	15%			9,45
			Other	No	0%			0,00
				Total				97,65

			Weather / season	Winter	20%		0,28
			distance	0	10%		0,14
			Other	No	0%		0,00
				Total			1,93
Workrelated allowance:							
			Scaffolding	No	0%		0,00
			Other	No	0%		0,00
			Total				1,93

BEAMS AND COLUMNS STEEL FIXED ON THE SPOT

kg/m	mh/t	kg/m	mh/t	kg/m	mh/t
5	15	8	13	20	10
6	14	11	12		

Calculation of manhours					
Pos.:				Name	María García Lloris
				Date	December 2013
				Case	Vejlevej 19
	Activity:	Reinforcement	Reference:		
		Y8			Drawings performar
Calc. Quant.:	451,074	kg/m			
Guiding time:					0,60
				add./red.	
		Add. Small quant.		5%	0,90
			Total		1,50

conditions:		Difficulty of the work			10%			0,15
		Volume		OK	0%			0,00
		Weather / season		Winter	20%			0,30
		distance		0	10%			0,15
		Other		No	0%			0,00
				Total				2,10
Workrelated allowance:								
		Scaffolding		No	0%			0,00
		Other		No	0%			0,00
		Total						2,10

Calculation of manhours								
Pos.:				Name	María García Lloris			
				Date	December 2013			
				Case	Vejlevej 19			
		Activity:	Reinforcement connetions	Reference:	Drawings performar			
Calc. Quant.:	187,35	kg/m						

Guiding time:								0,60
						add./red.		
			Add. Small quant.			5%		5,00
					Total			5,60
conditions:			Difficulty of the work			10%		0,56
			Volume		OK	0%		0,00
			Weather / season	Winter		20%		1,12
			distance	0		10%		0,56
			Other	No		0%		0,00
					Total			7,84
Workrelated allowance:								
			Scaffolding	No		0%		0,00
			Other	No		0%		0,00
			Total					7,84

Calculation of manhours							
Pos.:				Name	María García Lloris		
				Date	December 2013		

					Case	Vejlevej 19	
		Activity:	cast concrete		Reference:		
						Drawings performar	
Calc. Quant.:	1059,3	m3					
Guiding time:		0,7			mh/m3		42,00
					add./red.		
			Add. Small quant.		2%		0,84
					Total		42,84
conditions:			Difficulty of the work		15%		6,43
			Volume	OK	10%		4,28
			Weather / season	Winter	20%		8,57
			distance	0	10%		4,28
			Other	No	0%		0,00
				Total			66,40
Workrelated allowance:							
			Scaffolding	No	0%		0,00
			Other	No	0%		0,00
			Total				66,40

Foundations

mh/m ³	Width of foundation 250 mm	Width of foundation 500 mm
Casting with crane	1,0	0,7
Casting with pump	0,5	0,4
Casting with conveyor belt	0,7	0,4

Calculation of manhours								
Pos.:				Name	María García Lloris			
				Date	December 2013			
				Case	Vejlevej 19			
		Activity:	insulation	Reference:				
					Drawings			
Calc. Quant.:	232,634							
Guiding time:		0,12			mh/m2			0,00
					add./red.			7,20
			Add. Small quant.		0%			0,00
				Total				7,20
conditions:			Difficulty of the work		2%			0,00
			Volume	OK	10%			0,00
			Weather / season	Winter	20%			0,00
			distance	0	10%			0,00
			Other	No	0%			0,00
				Total				7,20
Workrelated allowance:								
			Scaffolding	No	0%			0,00
			Other	No	0%			0,00
			Total					7,20

Setting up insulation

	mh/m²
Mineralwool	0,07

Woodwool and cork	0,12
Gas concreteblocks t=100-150 mm	0,35
Lecablocks t=100-150 mm	0,45

Calculation of manhours					
Pos.:				Name	María García Lloris
				Date	December 2013
				Case	Vejlevej 19
		Activity:		Reference:	
			formwork for slab		
Calc. Quant.:	232,634	m2			
Guiding time:		0,8		mh/m2	60,00
				<small>add./red.</small>	
		Add. Small quant.		5%	3,00
				Total	63,00
conditions:		Difficulty of the work		20%	12,60
		Volume	OK	0%	0,00
		Weather / season	Winter	20%	12,60
		distance	0	15%	9,45
		Other	No	0%	0,00
			Total		97,65
Workrelated allowance:					
		Scaffolding	No	0%	0,00
		Other	No	0%	0,00
		Total			97,65

Deck form deckthickness 180-300 mm

mh/m ²	Work volume 400 m ²	Work volume 3000 m ²
Traditional 2,8 m above ground level	0,8	0,7
Traditional 2,8 m above ground level	1,2	1,0
System girders 2,8-4,0 m	0,7	0,6

Calculation of manhours							
Pos.:				Name	María García Lloris		
				Date	December 2013		
				Case	Vejlevej 19		
		Activity:	reinforcement floors	Reference:			
Calc. Quant.:	807,326	kg					
Guiding time:		0,19		mh/kg			
				add./red.			11,40
			Add. Small quant.		2%		0,23
				Total			11,63
conditions:		Difficulty of the work			10%		1,16
		Volume		OK	0%		0,00
		Weather / season		Winter	20%		2,33
		distance		0	10%		1,16
		Other		No	0%		0,00
				Total			16,28
Workrelated allowance:							

			Scaffolding	No	0%		0,00
			Other	No	0%		0,00
			Total				16,28

kg/m	mh/t	kg/m	mh/t
5	0,19	25	0,50
15	0,28	50	0,90

Calculation of manhours							
Pos.:				Name	María García Lloris		
				Date	December 2013		
				Case	Vejlevej 19		
		Activity:	casting elevator walls	Reference:			
Calc. Quant.:	2,23	m3					
Guiding time:		0,55		mh/m3			
				add./red.			33,00
		Add. Small quant.			0%		0,00
				Total			33,00
conditions:		Difficulty of the work			5%		1,65
		Volume		OK	0%		0,00
		Weather / season		Winter	20%		6,60
		distance		0	10%		3,30
		Other		No	0%		0,00

					Total		44,55
Workrelated allowance:							
			Scaffolding	No	0%		0,00
			Other	No	0%		0,00
			Total				44,55

