

Talude seco

Lamela	$\alpha$	A	P	$P_{sen\alpha}$	$P_{cos\alpha}$	l	c	$\varphi$	cl	$P \cos\alpha \operatorname{tg}\varphi$
	( $^{\circ}$ )	( $m^2$ )	(kN/m)	(kN/m)	(kN/m)	(m)	(kPa)	( $^{\circ}$ )	(kN/m)	(kN/m)
1	57	117	2106	1763,29	1151,5374	18,3	50	26	914,43	561,64
2	47	240	4320	3163,05	2942,369	14,7	50	26	734,10	1435,09
3	50	280	5040	3871,84	3226,5294	15,6	50	26	781,02	1573,68
4	20	265	4770	1655,23	4473,601	10,7	50	26	533,13	2181,92
5	8	250	4500	647,73	4453,139	10,1	50	26	505,26	2171,94
6	-2	205	3690	-125,01	3687,8817	10,0	50	26	500,29	1798,70
7	-12	180	3240	-682,60	3167,2785	10,2	50	26	511,48	1544,78
8	-20	36	648	-225,06	607,6612	10,7	50	26	533,19	296,38
$\Sigma$				10068,46					5012,91	11564,14

FS = 1,65

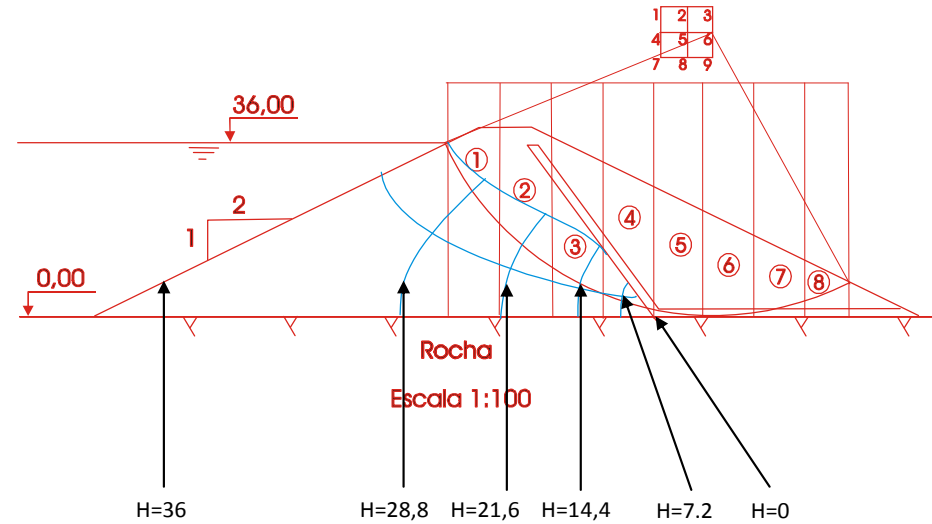
Talude com rede de fluxo - pressões neutras tomadas simplificada como coluna de água

Lamela	$\alpha$	A	P	$P_{sen\alpha}$	$P_{cos\alpha}$	l	u	U=ul	$P_{cos\alpha}-U$	c	$\varphi$	cl	$(P_{cos\alpha}-U)\operatorname{tg}\varphi$
	( $^{\circ}$ )	( $m^2$ )	(kN/m)	(kN/m)	(kN/m)	(m)	(kPa)	(kN/m)	(kN/m)	(kPa)	( $^{\circ}$ )	(kN/m)	(kN/m)
1	57	117	2223	1861,252	1215,5117	18,3	35	640,10	575,41	30	24	548,66	256,19
2	47	240	4560	3338,772	3105,834	14,7	85	1247,97	1857,86	30	24	440,46	827,17
3	50	280	5320	4086,937	3405,781	15,6	100	1562,05	1843,73	30	24	468,61	820,88
4	20	265	4770	1655,232	4473,601	10,7	50	533,13	3940,47	30	24	319,88	1754,41
5	8	250	4500	647,7293	4453,139	10,1	0	0,00	4453,14	50	26	505,26	2171,94
6	-2	205	3690	-125,013	3687,8817	10,0	0	0,00	3687,88	50	26	500,29	1798,70
7	-12	180	3240	-682,603	3167,2785	10,2	0	0,00	3167,28	50	26	511,48	1544,78
8	-20	36	648	-225,06	607,6612	10,7	0	0,00	607,66	50	26	533,19	296,38
$\Sigma$				10557,25								3827,83	9470,46

FS = 1,26

Talude com rede de fluxo - pressões neutras retiradas da rede

Lamela	H (m)	Z (m)	$u/\gamma_w$ (m)	$u_{\text{média}}$ (kPa)	
1	E	36,0	36,0	0,0	28,5
	D	24,7	19,0	5,7	
2	E	24,7	19,0	5,7	68,5
	D	18,0	10,0	8,0	
3	E	18,0	10,0	8,0	69,0
	D	10,8	5,0	5,8	
4	E	10,8	5,0	5,8	29,0
	D	2,0	2,0	0,0	
5	fora da rede de fluxo				0
6				0	
7				0	
8				0	



Lamela	$\alpha$ ( $^{\circ}$ )	A ( $m^2$ )	P (kN/m)	$P_{\text{sen}}\alpha$ (kN/m)	$P_{\text{cos}}\alpha$ (kN/m)	l (m)	u (kPa)	$U=ul$ (kN/m)	$P_{\text{cos}}\alpha-U$ (kN/m)	c (kPa)	$\varphi$ ( $^{\circ}$ )	cl (kN/m)	$(P_{\text{cos}}\alpha-U)\text{tg}\varphi$ (kN/m)
1	57	117	2223	1861,252	1215,5117	18,3	28,5	521,22	694,29	30	24	548,66	309,12
2	47	240	4560	3338,772	3105,834	14,7	68,5	1005,72	2100,11	30	24	440,46	935,03
3	50	280	5320	4086,937	3405,781	15,6	69	1077,81	2327,97	30	24	468,61	1036,48
4	20	265	4770	1655,232	4473,601	10,7	29	309,21	4164,39	30	24	319,88	1854,10
5	8	250	4500	647,7293	4453,139	10,1	0	0,00	4453,14	50	26	505,26	2171,94
6	-2	205	3690	-125,013	3687,8817	10,0	0	0,00	3687,88	50	26	500,29	1798,70
7	-12	180	3240	-682,603	3167,2785	10,2	0	0,00	3167,28	50	26	511,48	1544,78
8	-20	36	648	-225,06	607,6612	10,7	0	0,00	607,66	50	26	533,19	296,38
$\Sigma$				10557,25								3827,83	9946,53

FS = 1,30



