

**ALLEGATO A**  
**CALCOLO SLP E VOLUMI**

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**CASCINA AL RONCO – MONTAGNOLA**  
**Piano di Recupero TR-16**  
**Località Ronco**  
**Caidate di Sumirago (VA)**

S.L.P. PIANO TERRA									
N° ID	Lato A	Lato B	Lato C	Semiperimetro $P=(A+B+C)/2$	P - A	P - B	P - C	$S = \sqrt{[P \times (P - A) \times (P - B) \times (P - C)]}$	S.L.P.
S1	21.09	6.38	22.15	24.81	3.72	18.43	2.66	$S = \sqrt{(24.81 \times 3.72 \times 18.43 \times 2.66)} = 67.26$	135.12 mq
	19.74	7.00	22.15	24.45	4.71	17.45	2.30	$S = \sqrt{(24.45 \times 4.71 \times 17.45 \times 2.30)} = 67.86$	
S2	13.59	6.19	14.70	17.24	3.65	11.05	2.54	$S = \sqrt{(17.24 \times 3.65 \times 11.05 \times 2.54)} = 42.03$	83.28 mq
	13.33	6.19	14.70	17.11	3.78	10.92	2.41	$S = \sqrt{(17.11 \times 3.78 \times 10.92 \times 2.41)} = 41.26$	
S3	16.03	6.71	17.75	20.25	4.22	13.54	2.50	$S = \sqrt{(20.25 \times 4.22 \times 13.54 \times 2.50)} = 53.68$	108.67 mq
	16.44	6.69	17.75	20.44	4.00	13.75	2.69	$S = \sqrt{(20.44 \times 4.00 \times 13.75 \times 2.69)} = 54.99$	
S4	9.99	7.46	11.29	14.37	4.38	6.91	3.08	$S = \sqrt{(14.37 \times 4.38 \times 6.91 \times 3.08)} = 36.60$	65.33 mq
	9.56	6.01	11.29	13.43	3.87	7.42	2.14	$S = \sqrt{(13.43 \times 3.87 \times 7.42 \times 2.14)} = 28.73$	
S5	20.26	7.13	21.01	24.20	3.94	17.07	3.19	$S = \sqrt{(24.20 \times 3.94 \times 17.07 \times 3.19)} = 72.06$	158.32 mq
	18.54	9.31	21.01	24.43	5.89	15.12	3.42	$S = \sqrt{(24.43 \times 5.89 \times 15.12 \times 3.42)} = 86.26$	
S6	11.22	5.51	12.50	14.62	3.40	9.11	2.12	$S = \sqrt{(14.62 \times 3.40 \times 9.11 \times 2.12)} = 30.91$	62.85 mq
	11.60	5.52	12.50	14.81	3.21	9.29	2.31	$S = \sqrt{(14.81 \times 3.21 \times 9.29 \times 2.31)} = 31.94$	
S7	5.60	5.36	8.04	9.50	3.90	4.14	1.46	$S = \sqrt{(9.50 \times 3.90 \times 4.14 \times 1.46)} = 14.96$	30.38 mq
	5.60	5.51	8.04	9.58	3.98	4.07	1.54	$S = \sqrt{(9.58 \times 3.98 \times 4.07 \times 1.54)} = 15.41$	
S8	19.54	6.33	20.51	23.19	3.65	16.86	2.68	$S = \sqrt{(23.19 \times 3.65 \times 16.86 \times 2.68)} = 61.84$	118.21 mq
	19.04	6.27	20.51	22.91	3.87	16.64	2.40	$S = \sqrt{(22.91 \times 3.87 \times 16.64 \times 2.40)} = 59.50$	
	A dedurre: rientro finestre							$-(2.64 + 2.55 + 2.63 + 2.63) \times 0.30 = -3.14$	
S9	9.66	6.56	10.84	13.53	3.87	6.97	2.69	$S = \sqrt{(13.53 \times 3.87 \times 6.97 \times 2.69)} = 31.33$	52.09 mq
	9.15	5.81	10.84	12.90	3.75	7.09	2.06	$S = \sqrt{(12.90 \times 3.75 \times 7.09 \times 2.06)} = 26.58$	
	A dedurre: locale deposito rifiuti							$-(3.06 + 2.76)/2 \times 2.00 = -5.82$	
<b>SLP TOTALE</b>									<b>814.25 mq</b>

<b>VOLUME PIANO TERRA</b>	814.25	x	3.00	=	<b>2442.76 mc</b>
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## S.L.P. PIANO PRIMO

N° ID	Lato A	Lato B	Lato C	Semiperimetro $P=(A+B+C)/2$	P - A	P - B	P - C	$S = \sqrt{[P \times (P - A) \times (P - B) \times (P - C)]}$	S.L.P.
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S10	21.09	6.35	22.15	24.80	3.71	18.45	2.65	$S = \sqrt{(24.80 \times 3.71 \times 18.45 \times 2.65)} = 66.95$	120.21 mq
	19.76	6.91	22.15	24.41	4.65	17.50	2.26	$S = \sqrt{(24.41 \times 4.65 \times 17.50 \times 2.26)} = 67.00$	
	A dedurre: vano scala							$-(4.80+ 4.36)/2 \times 3.00 = -13.74$	
S11	13.59	6.19	14.70	17.24	3.65	11.05	2.54	$S = \sqrt{(17.24 \times 3.65 \times 11.05 \times 2.54)} = 42.03$	86.59 mq
	13.33	6.69	14.70	17.36	4.03	10.67	2.66	$S = \sqrt{(17.36 \times 4.03 \times 10.67 \times 2.66)} = 44.56$	
S12	21.09	6.35	22.15	24.80	3.71	18.45	2.65	$S = \sqrt{(24.80 \times 3.71 \times 18.45 \times 2.65)} = 66.95$	127.85 mq
	19.76	6.91	22.15	24.41	4.65	17.50	2.26	$S = \sqrt{(24.41 \times 4.65 \times 17.50 \times 2.26)} = 67.00$	
	A dedurre: vano scala							$-(1.85 \times 1.00) + (1.87 \times 1.55) + (1.50 \times 0.90) = -6.10$	
S13	9.50	5.06	10.76	12.66	3.16	7.60	1.90	$S = \sqrt{(12.66 \times 3.16 \times 7.60 \times 1.90)} = 24.03$	53.16 mq
	9.91	6.50	10.76	13.59	3.68	7.09	2.83	$S = \sqrt{(13.59 \times 3.68 \times 7.09 \times 2.83)} = 31.61$	
	A dedurre: rientro muratura							$-(2.40+ 2.80+ 3.10) \times 0.30 = -2.49$	
S14	20.29	7.29	21.09	24.34	4.05	17.05	3.25	$S = \sqrt{(24.34 \times 4.05 \times 17.05 \times 3.25)} = 73.79$	153.01 mq
	18.54	9.48	21.09	24.56	6.02	15.08	3.47	$S = \sqrt{(24.56 \times 6.02 \times 15.08 \times 3.47)} = 87.84$	
	A dedurre: vano scala							$-(1.42 \times 3.60) - (1.20 \times 2.92) = -8.62$	
S15	5.69	11.48	12.55	14.86	9.17	3.38	2.31	$S = \sqrt{(14.86 \times 9.17 \times 3.38 \times 2.31)} = 32.62$	64.12 mq
	5.63	11.19	12.55	14.69	9.06	3.50	2.14	$S = \sqrt{(14.69 \times 9.06 \times 3.50 \times 2.14)} = 31.50$	
S16	5.61	5.63	8.14	9.69	4.08	4.06	1.55	$S = \sqrt{(9.69 \times 4.08 \times 4.06 \times 1.55)} = 15.77$	31.10 mq
	5.63	5.46	8.14	9.62	3.99	4.16	1.48	$S = \sqrt{(9.62 \times 3.99 \times 4.16 \times 1.48)} = 15.32$	
S17	19.55	6.35	20.55	23.23	3.68	16.88	2.68	$S = \sqrt{(23.23 \times 3.68 \times 16.88 \times 2.68)} = 62.07$	119.43 mq
	19.04	6.37	20.55	22.98	3.94	16.61	2.43	$S = \sqrt{(22.98 \times 3.94 \times 16.61 \times 2.43)} = 60.45$	
	A dedurre: rientro muratura							$-(2.50+ 2.55+ 2.63+ 2.63) \times 0.30 = -3.09$	
<b>SLP TOTALE</b>									<b>755.45 mq</b>

VOLUME PIANO PRIMO	755.45 -	53.16	x	3.00 =	2106.88	mc	=	2250.41 mc
		+ 53.16	x	2.70 =	143.52	mc		

SLP TOTALE	814.25	+	755.45	=	1569.71 mq
VOLUME TOTALE	2442.76	+	2250.41	=	4693.17 mc