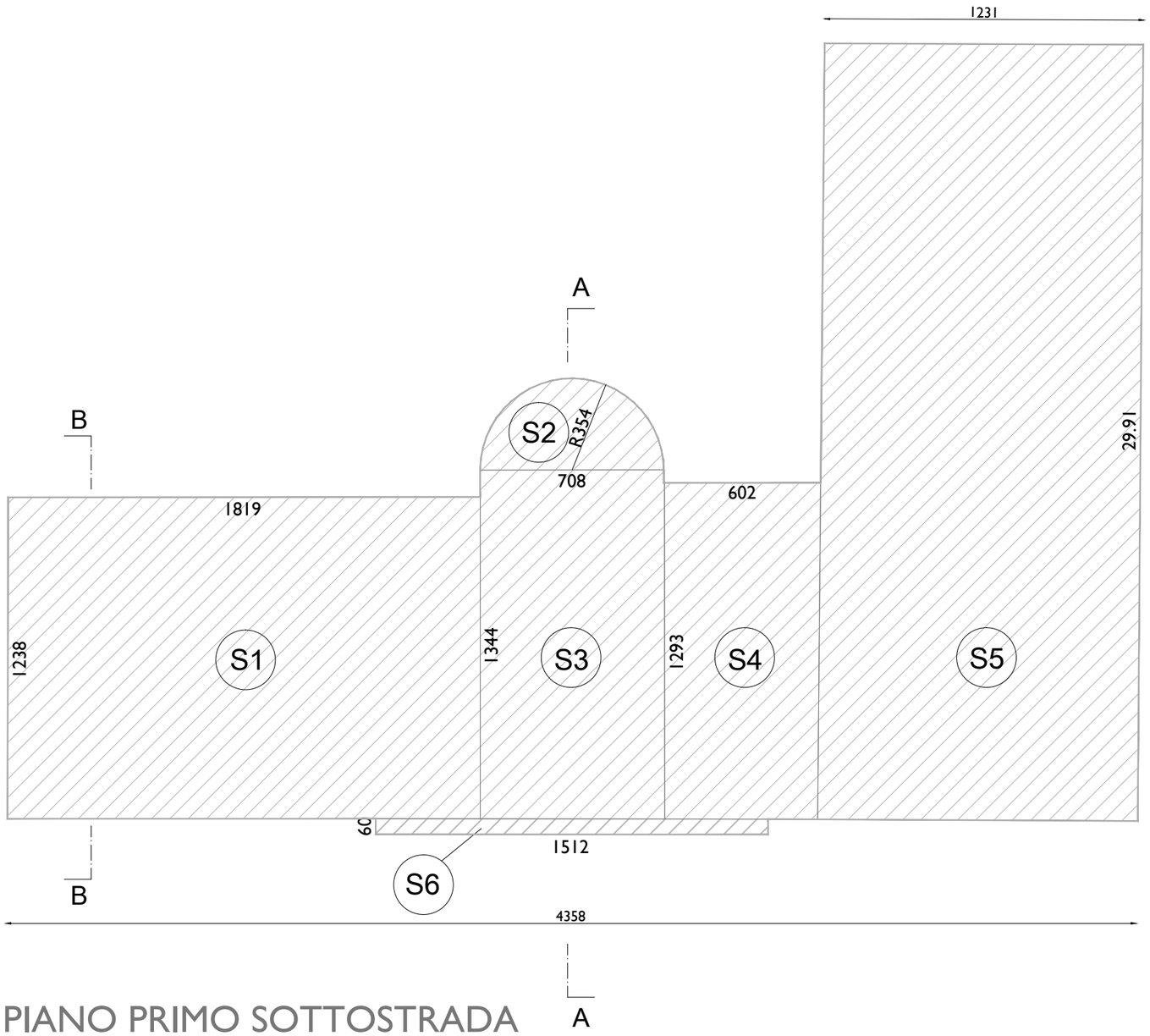
PORU

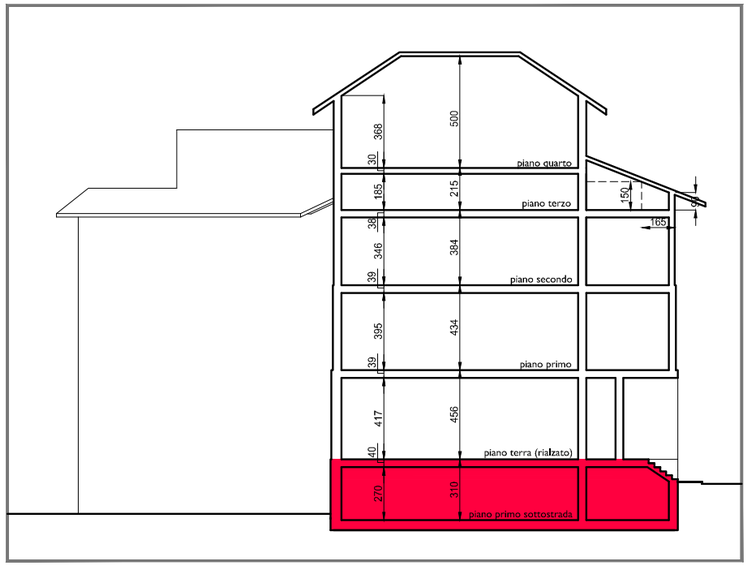


PIANO PRIMO SOTTOSTRADA
H= ml 2.70

S1 = ml 18.19 x ml 12.38 = mq 225.19
S2 = (π x ml 3.54 x ml 3.54)/2 = mq 19.67
S3 = ml 13.44 x ml 7.08 = mq 95.16
S4 = ml 12.93 x 6.02 = mq 77.84
S5 = ml 29.91 x ml 12.31 = mq 368.19
S6 = ml 0.60 x ml 15.12 = mq 9.07

S.U.L. = mq 795.12

V = mq 795.12 x 3.10 ml = 2464.89 mc



sezione schematica A-A

Alberto Marchetti ingegnere - Via A. Angeli,4 - 61121 Pesaro

STATO DI FATTO: CALCOLO S.U.L. E VOLUME
piano primo sottostrada

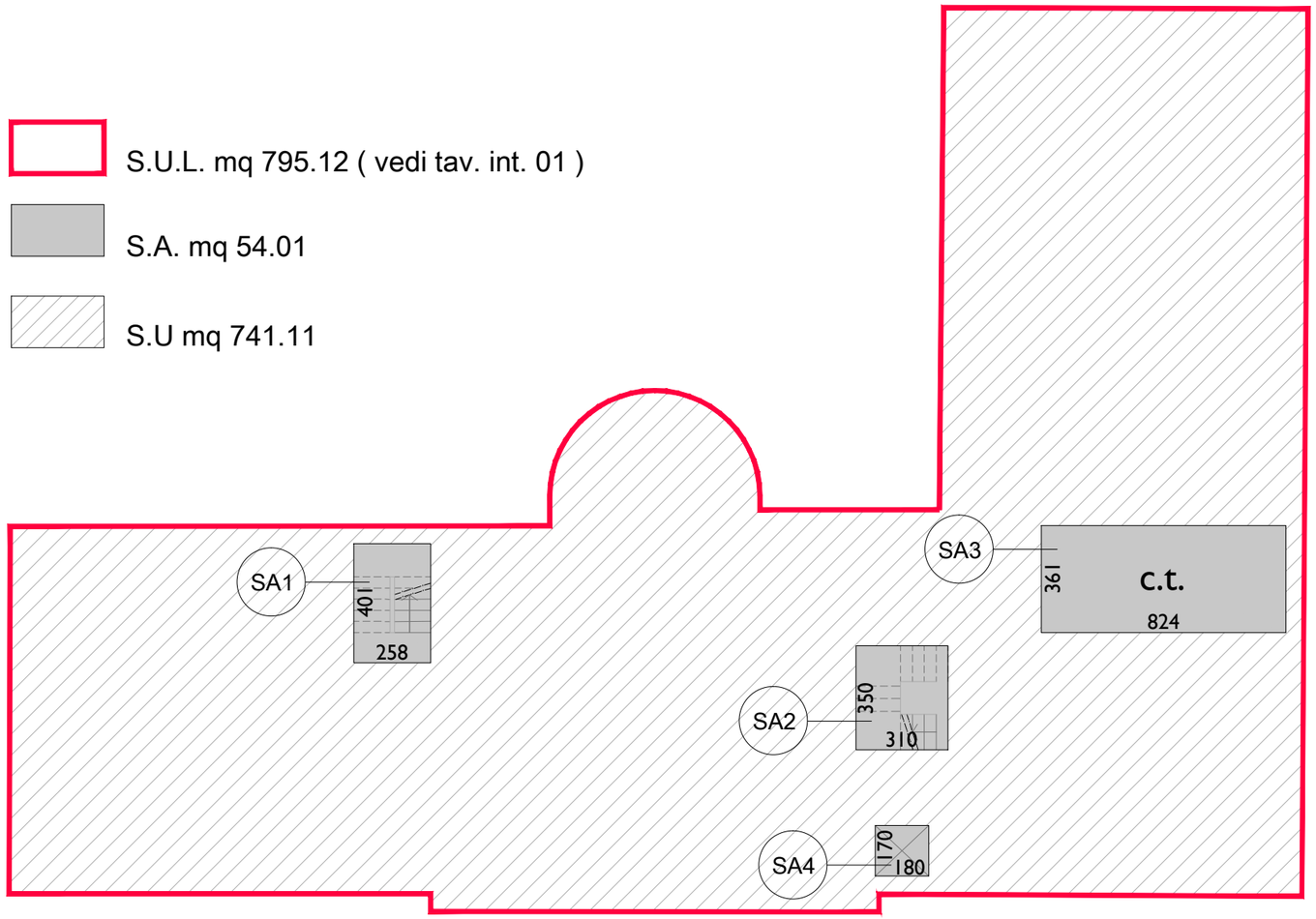
Tav. Int. 01

PORU

S.U.L. mq 795.12 (vedi tav. int. 01)

S.A. mq 54.01

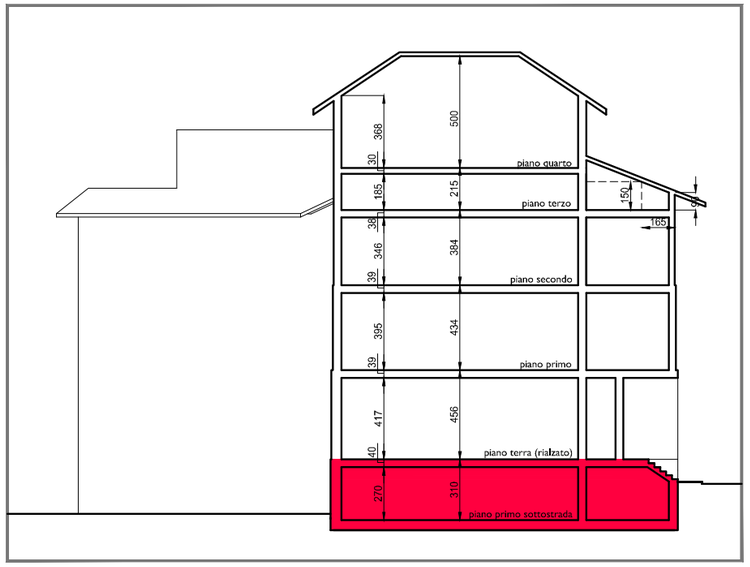
S.U mq 741.11



PIANO PRIMO SOTTOSTRADA
H= ml 2.70

SA1 = ml 2.58 x ml 4.01 = mq 10.35
SA2 = ml 3.10 x ml 3.50 = mq 10.85
SA3 = ml 8.24 x ml 3.61 = mq 29.75
SA4 = ml 1.80 x 1.70 = mq 3.06

S.A. = mq 54.01



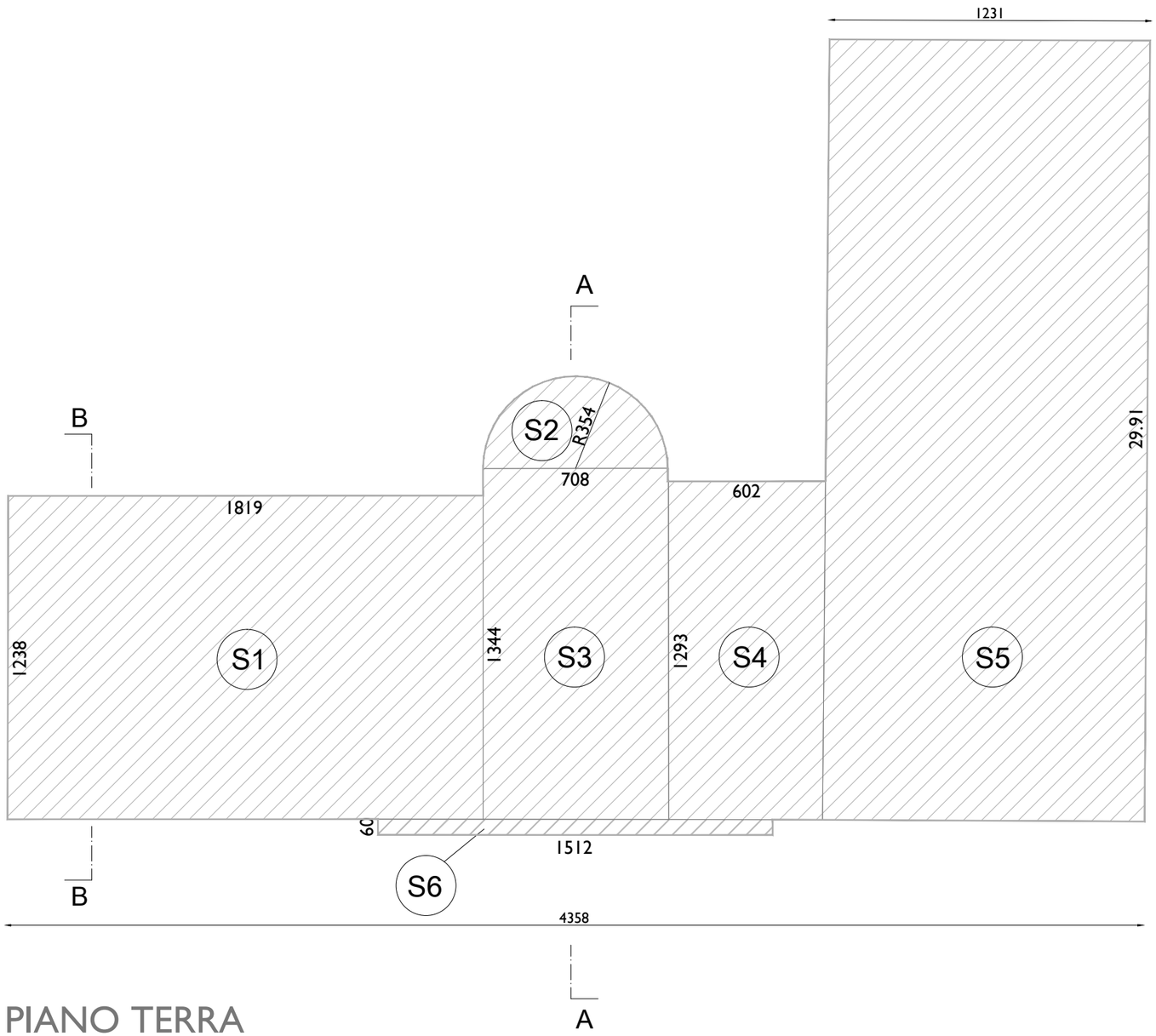
sezione schematica A-A

Alberto Marchetti ingegnere - Via A. Angeli,4 - 61121 Pesaro

STATO DI FATTO: CALCOLO SUPERFICI
piano primo sottostrada

Tav. Int. 02

PORU

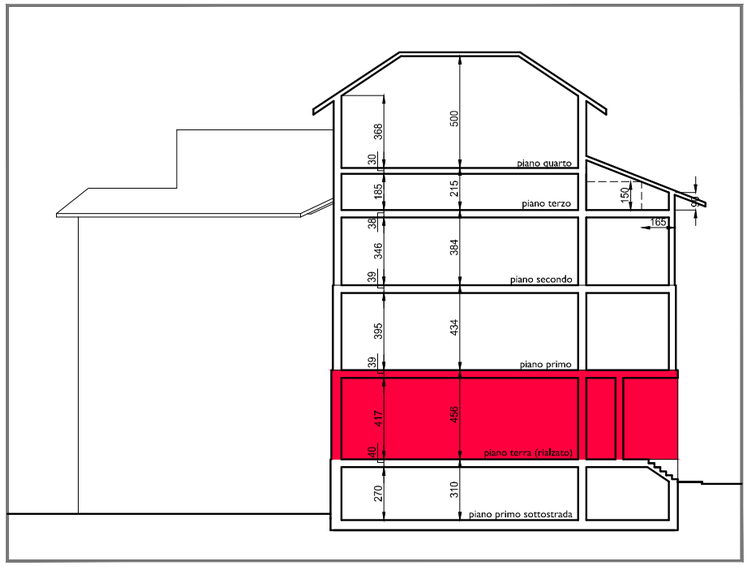


PIANO TERRA
H= ml 4.17

S1	=	ml 18.19 x ml 12.38 = mq 225.19
S2	=	(π x ml 3.54 x ml 3.54) /2 = mq 19.67
S3	=	ml 13.44 x ml 7.08 = mq 95.16
S4	=	ml 12.93 x 6.02 = mq 77.84
S5	=	ml 29.91 x ml 12.31 = mq 368.19
S6	=	ml 0.60 x ml 15.12 = mq 9.07

S.U.L. = mq 795.12

V = mq 795.12 x 4.56 ml = 3625.75 mc



sezione schematica A-A

Alberto Marchetti ingegnere - Via A. Angeli,4 - 61121 Pesaro

STATO DI FATTO: CALCOLO S.U.L. E VOLUME
piano terra

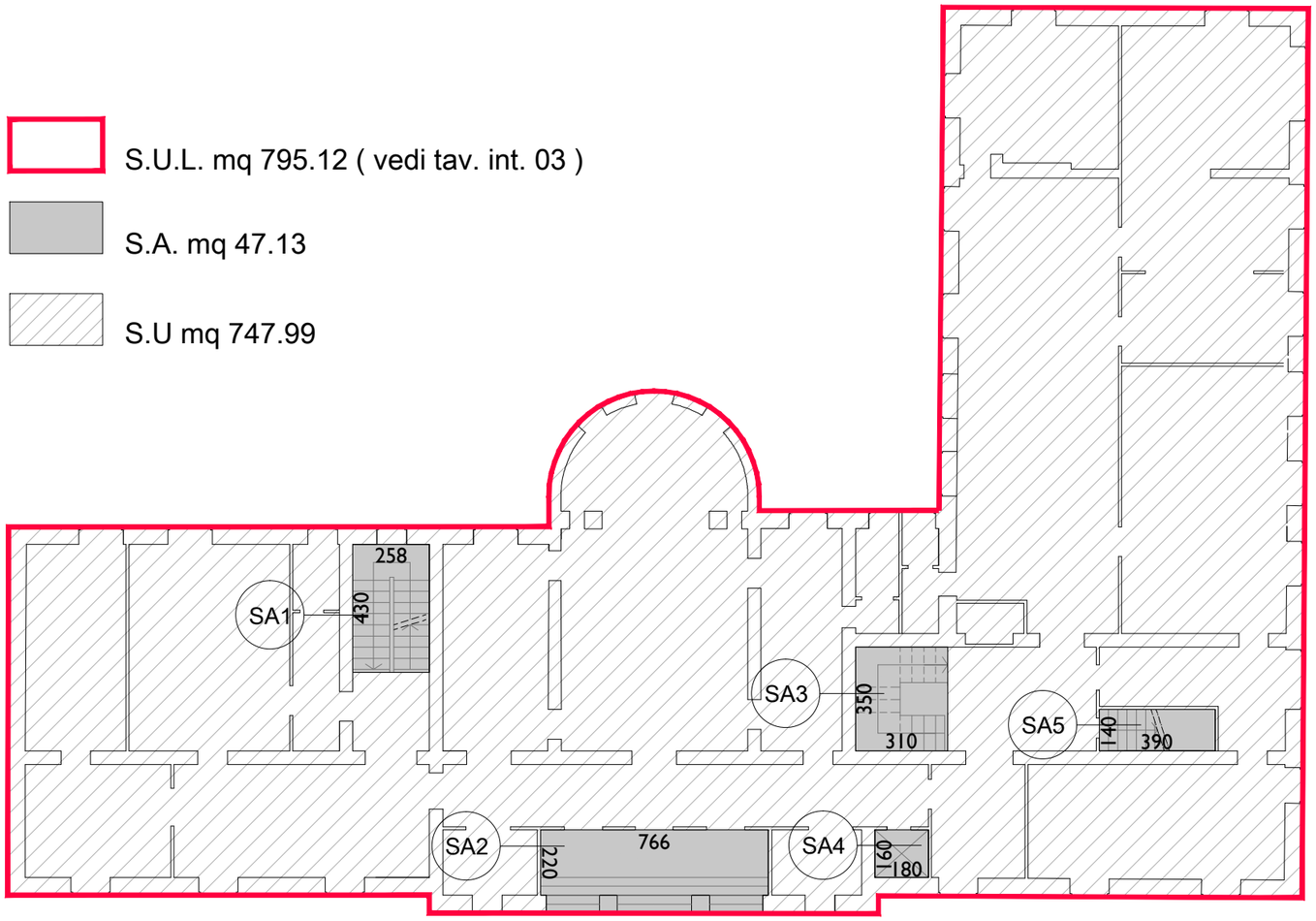
Tav. Int. 03

PORU

S.U.L. mq 795.12 (vedi tav. int. 03)

S.A. mq 47.13

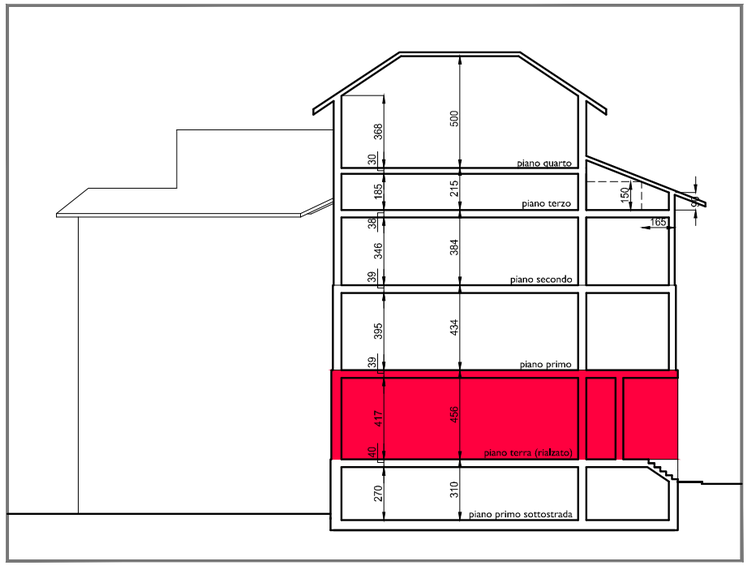
S.U mq 747.99



PIANO TERRA
H= ml 4.17

SA1 = ml 4.30 x ml 2.58 = mq 11.09
SA2 = ml 2.20 x ml 7.66 = mq 16.85
SA3 = ml 3.10 x ml 3.50 = mq 10.85
SA4 = ml 1.80 x 1.60 = mq 2.88
SA5 = ml 3.90 x 1.40 = mq 5.46

S.A. = mq 47.13



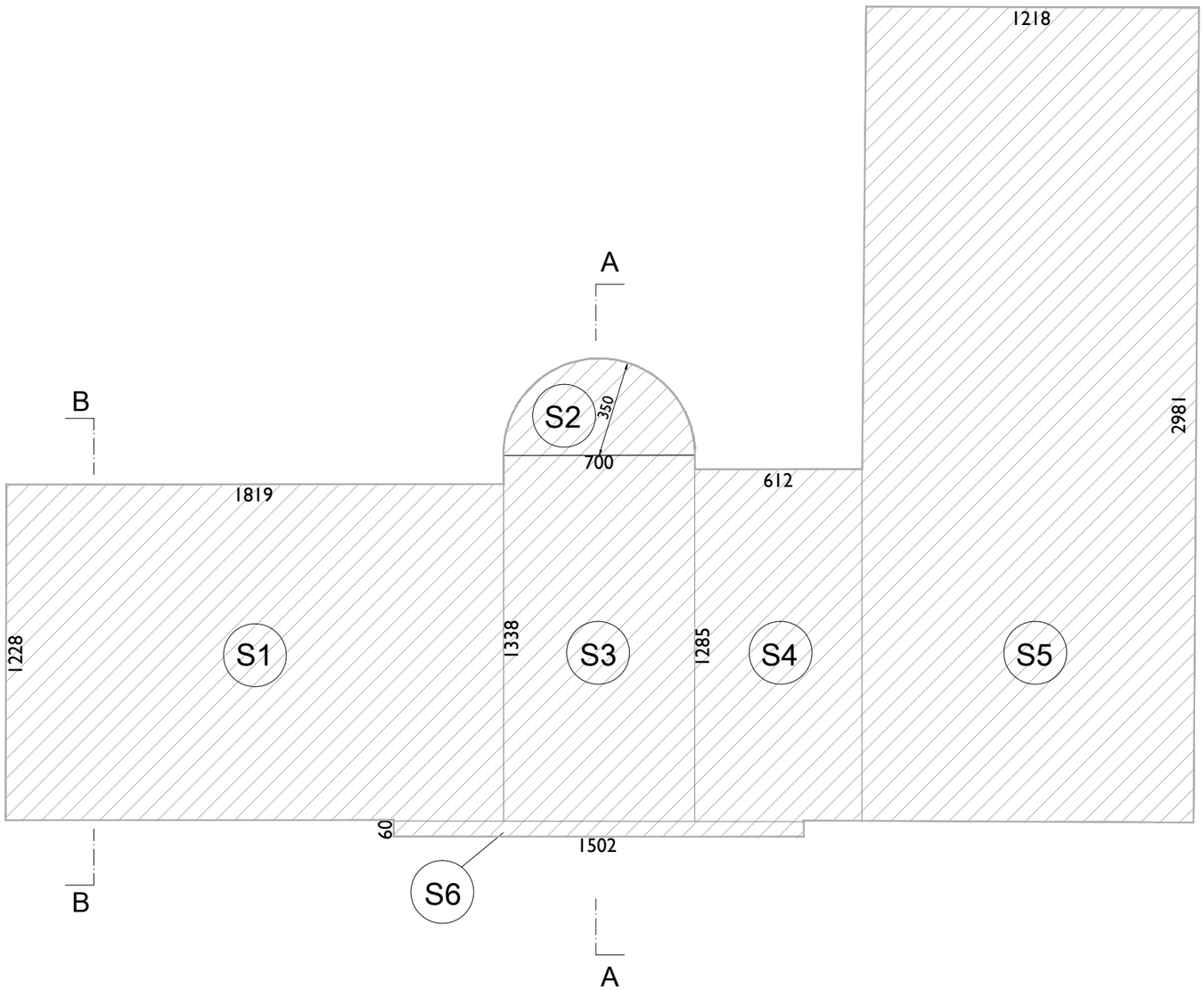
sezione schematica A-A

Alberto Marchetti ingegnere - Via A. Angeli,4 - 61121 Pesaro

STATO DI FATTO: CALCOLO SUPERFICI
piano terra

Tav. Int. 04

PORU

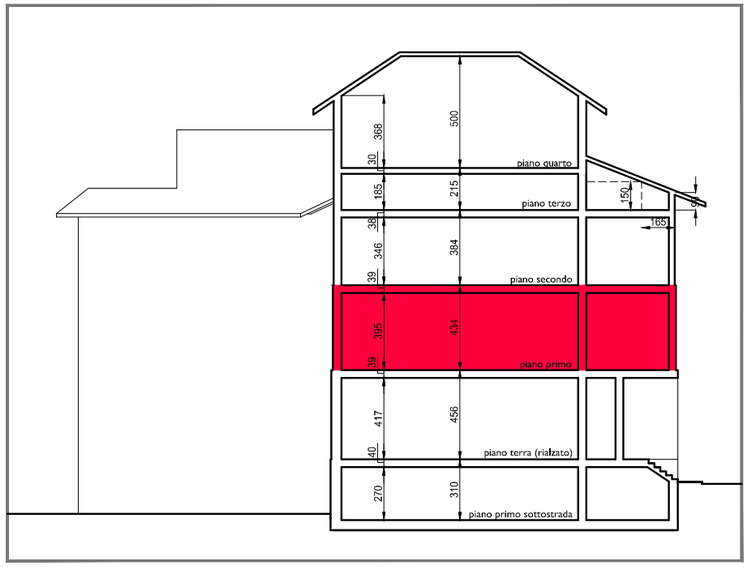


PIANO PRIMO
H= ml 3.95

S1	= ml 12.28 x ml 18.19 = mq 223.37
S2	= (π x ml 3.5 x ml 3.5) /2 = mq 19.23
S3	= ml 13.38 x ml 7.00 = mq 93.66
S4	= ml 12.85 x 6.12 = mq 78.64
S5	= ml 29.81 x ml 12.18 = mq 363.09
S6	= ml 0.60 x ml 15.02 = mq 9.01

S.U.L. = mq 787.00

V = mq 787.00 x 4.34 ml = 3415.58 mc



sezione schematica A-A

Alberto Marchetti ingegnere - Via A. Angeli,4 - 61121 Pesaro

STATO DI FATTO: CALCOLO S.U.L. E VOLUME
piano primo

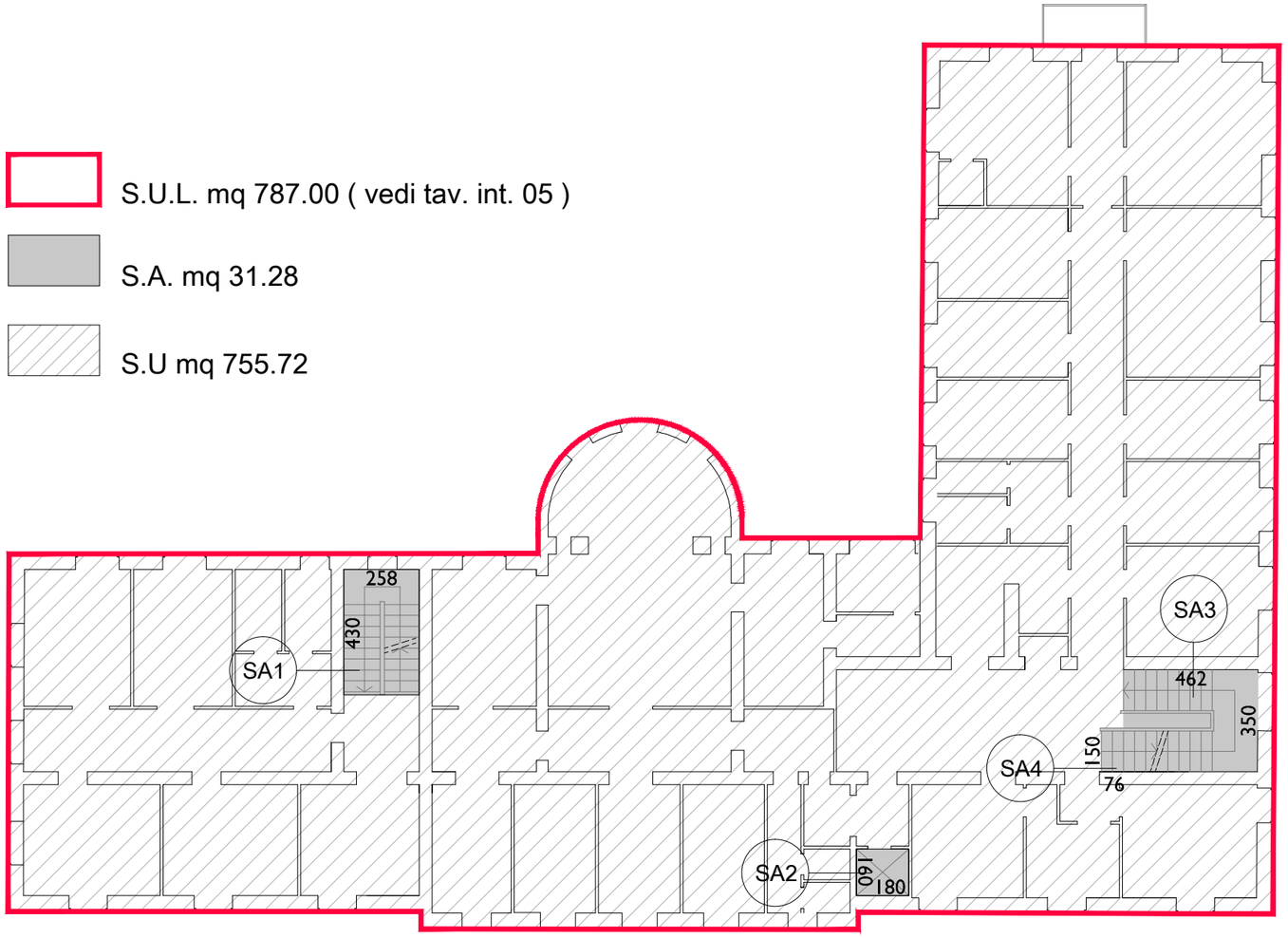
Tav. Int. 05

PORU

S.U.L. mq 787.00 (vedi tav. int. 05)

S.A. mq 31.28

S.U mq 755.72



PIANO PRIMO

H= ml 4.17

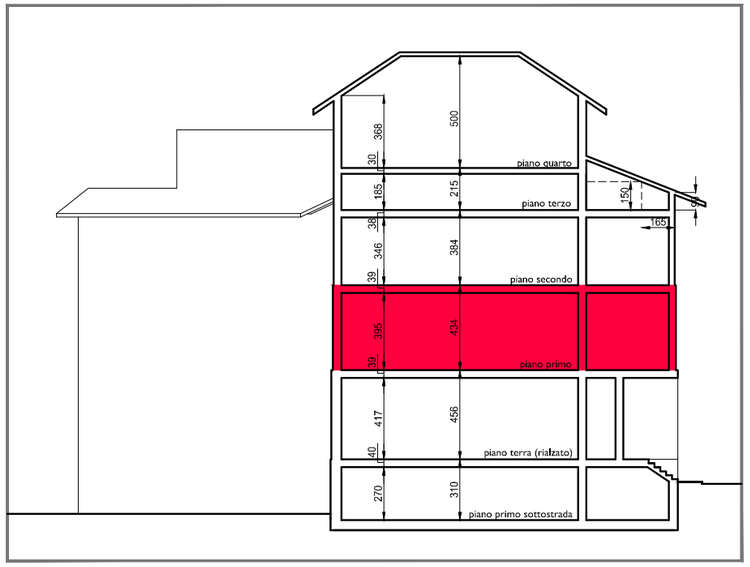
SA1 = ml 4.30 x ml 2.58 = mq 11.09

SA2 = ml 1.80 x ml 1.60 = mq 2.88

SA3 = ml 4.62 x ml 3.50 = mq 16.17

SA4 = ml 1.50 x 0.76 = mq 1.14

S.A. = mq 31.28

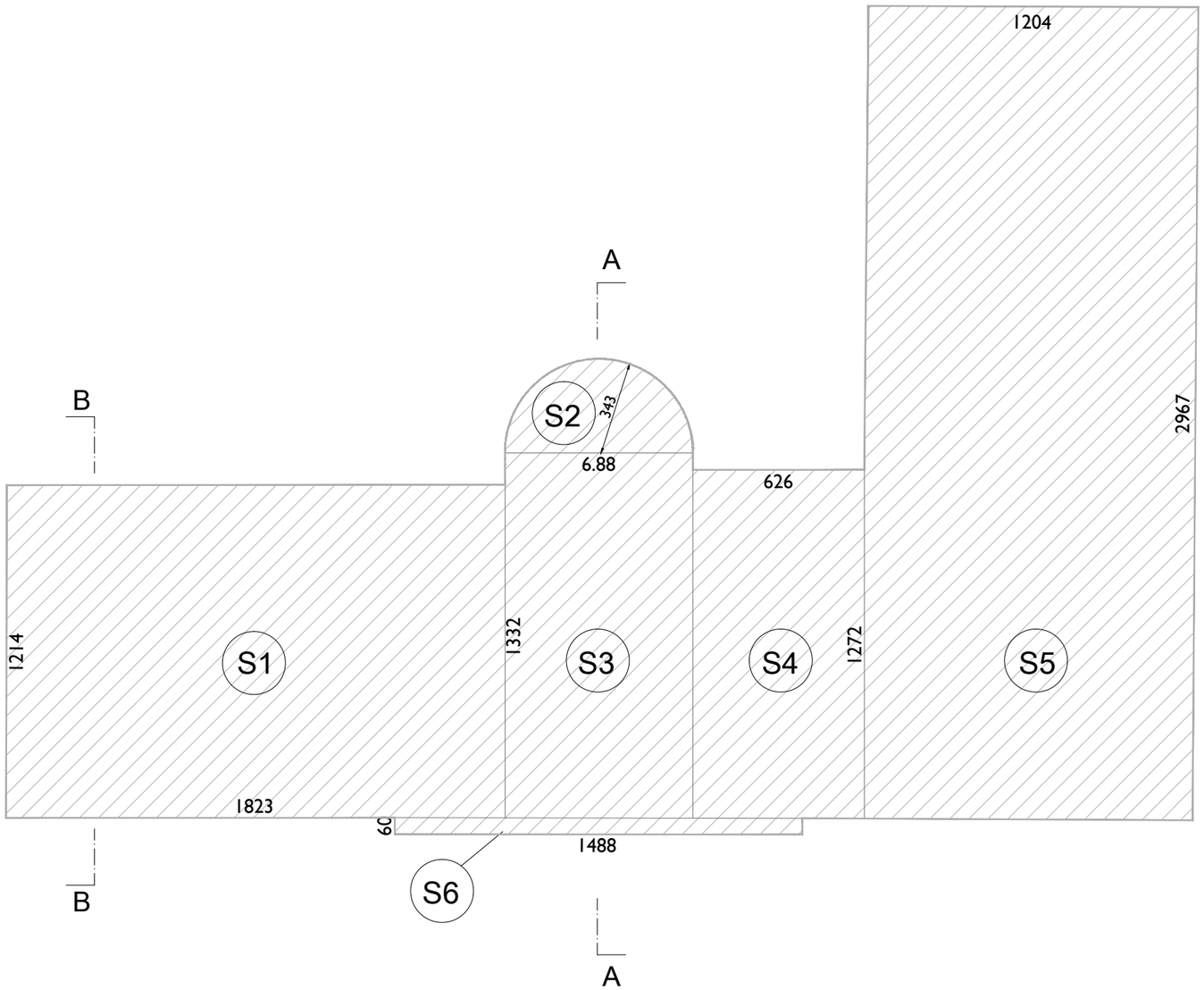


sezione schematica A-A

Alberto Marchetti ingegnere - Via A. Angeli,4 - 61121 Pesaro

STATO DI FATTO: CALCOLO SUPERFICI
piano primo

Tav. Int. 06



PIANO SECONDO

H= ml 3.46

S1 = ml 18.23 x ml 12.14 = mq 221.31

S2 = (π x ml 3.43 x ml 3.43) /2 = mq 18.47

S3 = ml13.32 x ml 6.88 = mq 91.64

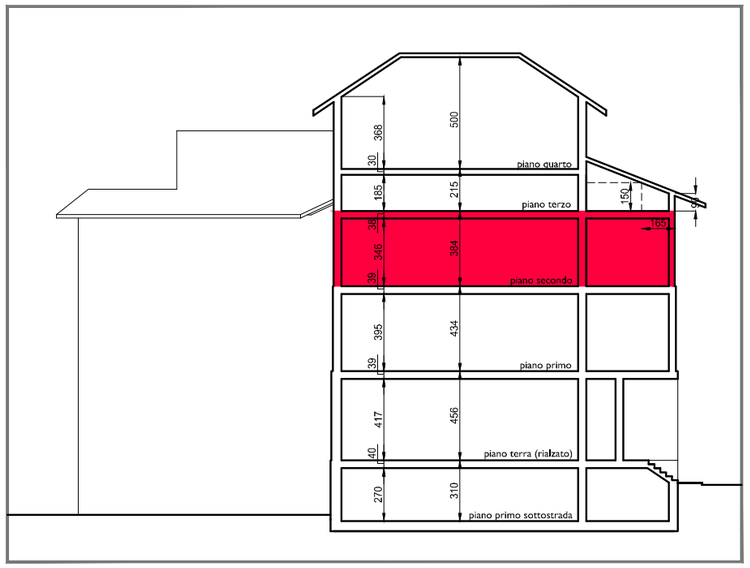
S4 = ml 12.72 x 6.26 = mq 79.63

S5 = ml 29.67 x ml 12.04 = mq 357.23

S6 = ml 0.60 x ml 14.88 = mq 8.93

S.U.L. = mq 777.21

V = mq 777.21 x 3.84 ml = 2984.49 mc



sezione schematica A-A

PORU

Alberto Marchetti ingegnere - Via A. Angeli,4 - 61121 Pesaro

STATO DI FATTO: CALCOLO S.U.L. E VOLUME
piano secondo

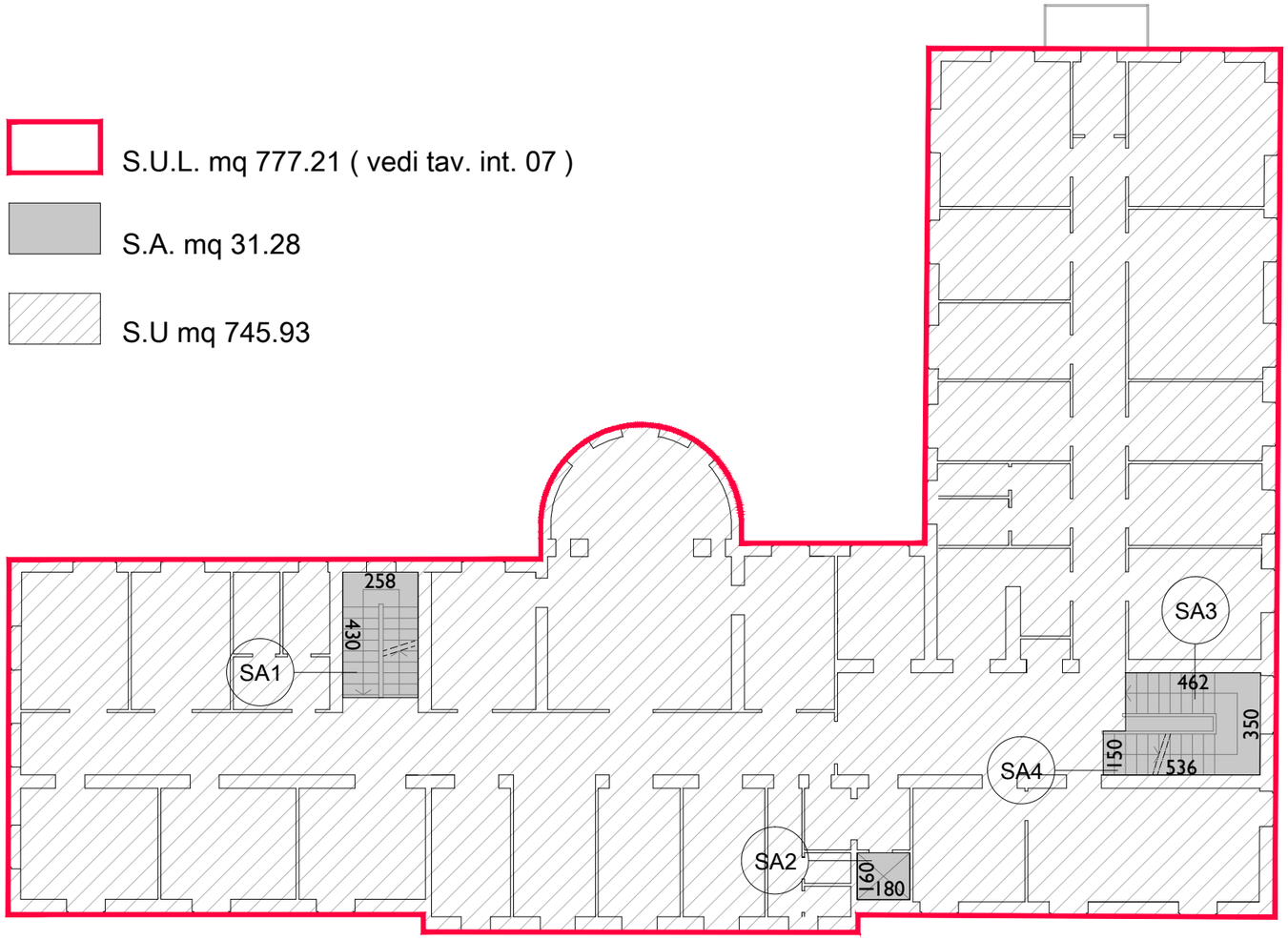
Tav. Int. 07

PORU

S.U.L. mq 777.21 (vedi tav. int. 07)

S.A. mq 31.28

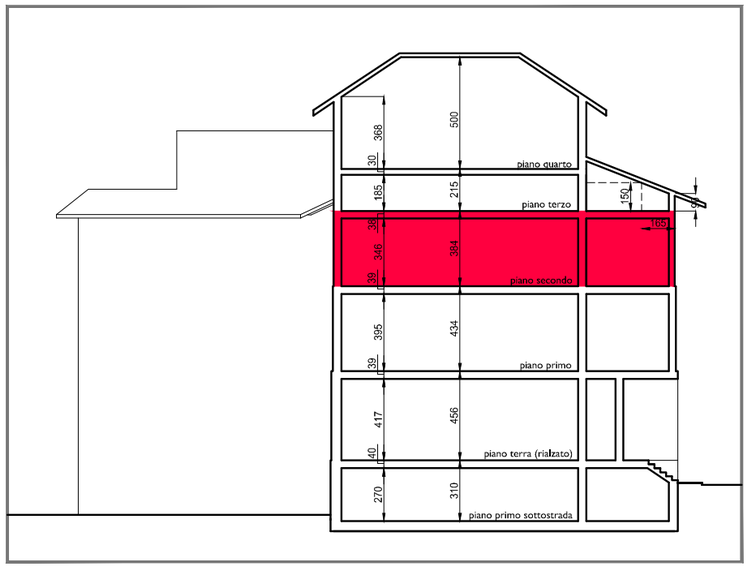
S.U mq 745.93



PIANO SECONDO
H= ml 3.46

SA1 = ml 4.30 x ml 2.58 = mq 11.09
SA2 = ml 1.80 x ml 1.60 = mq 2.88
SA3 = ml 4.62 x ml 3.50 = mq 16.17
SA4 = ml 1.50 x 0.76 = mq 1.14

S.A. = mq 31.28



sezione schematica A-A

Alberto Marchetti ingegnere - Via A. Angeli,4 - 61121 Pesaro

STATO DI FATTO: CALCOLO SUPERFICI
piano secondo

Tav. Int. 08

PORU

CALCOLO S.U.L.

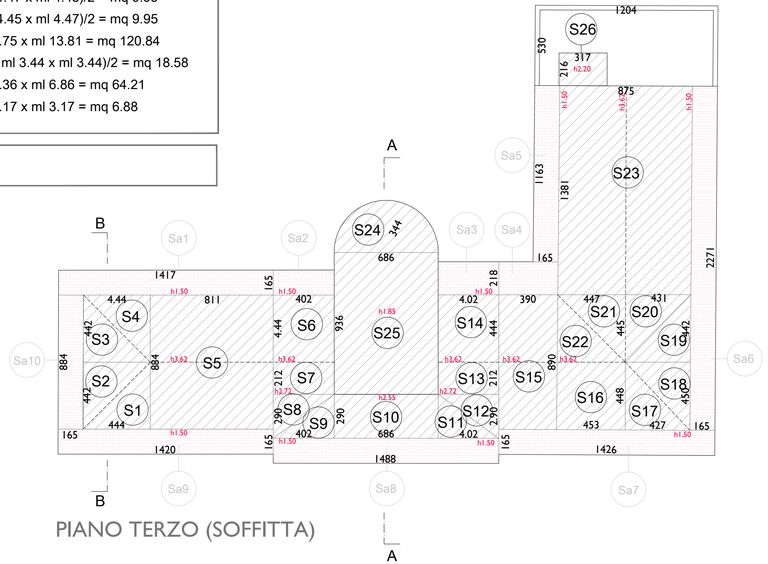
S1 = (ml 4.44 x ml 4.42)/2 = mq 9.81
S2 = (ml 4.44 x ml 4.42)/2 = mq 9.81
S3 = (ml 4.44 x ml 4.42)/2 = mq 9.81
S4 = (ml 4.44 x ml 4.42)/2 = mq 9.81
S5 = ml 8.84 x ml 8.11 = mq 71.69
S6 = ml 4.44 x ml 4.02 = mq 17.85
S7 = ml 2.12 x 4.02 = mq 8.52
S8 = (ml 2.90 x ml 4.02)/2 = mq 5.83
S9 = (ml 2.90 x ml 4.02)/2 = mq 5.83
S10 = ml 6.86 x ml 2.90 = mq 19.89
S11 = (ml 2.90 x ml 4.02)/2 = mq 5.83
S12 = (ml 2.90 x ml 4.02)/2 = mq 5.83
S13 = ml 2.12 x 4.02 = mq 8.52
S14 = ml 4.44 x ml 4.02 = mq 17.85
S15 = ml 8.90 x ml 3.90 = mq 34.71
S16 = ml 4.53 x ml 4.48 = mq 20.29
S17 = (ml 4.27 x ml 4.48)/2 = mq 9.56
S18 = (ml 4.27 x ml 4.50)/2 = mq 9.61
S19 = (ml 4.42 x ml 4.31)/2 = mq 9.53
S20 = (ml 4.42 x ml 4.31)/2 = mq 9.53
S21 = (ml 4.47 x ml 4.45)/2 = mq 9.95
S22 = (ml 4.45 x ml 4.47)/2 = mq 9.95
S23 = ml 8.75 x ml 13.81 = mq 120.84
S24 = (π x ml 3.44 x ml 3.44)/2 = mq 18.58
S25 = ml 9.36 x ml 6.86 = mq 64.21
S26 = ml 2.17 x ml 3.17 = mq 6.88

S.U.L. = mq 530.52

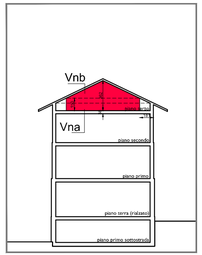
CALCOLO S.a (h < ml 1.50)

Sa1 = ml 14.17 x ml 1.65 = mq 23.38
Sa2 = ml 4.02 x ml 1.65 = mq 6.63
Sa3 = ml 4.02 x ml 2.18 = mq 8.76
Sa4 = ml 3.90 x ml 2.18 = mq 8.50
Sa5 = ml 11.63 x ml 1.65 = mq 19.19
Sa6 = ml 22.71 x ml 1.65 = mq 37.47
Sa7 = ml 14.26 x ml 1.65 = mq 23.53
Sa8 = ml 14.88 x ml 1.65 = mq 24.55
Sa9 = ml 14.20 x ml 1.65 = mq 23.43
Sa10 = ml 8.84 x ml 1.65 = mq 14.59

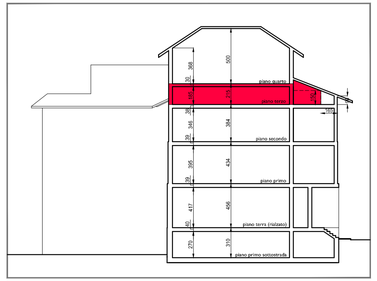
S.a. = mq 190.03



PIANO TERZO (SOFFITTA)



sezione schematica B-B



sezione schematica A-A

CALCOLO VOLUME

V1a = S1 x ml 1.50 = mq 9.81 x ml 1.50 = mc 14.72
V1b = (S1 x 2.12)/2 = (mq 9.81 x ml 2.12)/2 = mc 10.40
V2a = S2 x ml 1.50 = mq 9.81 x ml 1.50 = mc 14.72
V2b = (S2 x 2.12)/2 =(mq 9.81 x ml 2.12)/2 = mc 10.40
V3a = S3 x ml 1.50 = mq 9.81 x ml 1.50 = mc 14.72
V3b = (S3 x ml 2.12)/2 = (mq 9.81 x ml 2.12)/2 = mc 10.40
V4a = S4 x ml 1.50 = mq 9.81 x ml 1.50 = mc 14.72
V4b = (S4 x ml 2.12)/2 = (mq 9.81 x ml 2.12)/2 = mc 10.40
V5a = S5 x ml 1.50 = mq 71.69 x ml 1.50 = mc 107.54
V5b = (S5 x ml 2.12)/2 =(mq 71.69 x ml 2.12)/2 = mc 75.99
V6a = S6 x ml 1.50 = mq 17.85 x ml 1.50 = mc 26.78
V6b = (S6 x ml 2.12)/2 = (mq 17.85 x ml 2.12)/2 = mc 18.92
V7a = S7 x ml 2.72 = mq 8.52 x ml 2.72 = mc 23.17
V7b = (S7 x ml 0.90)/2 = (mq 8.52 x ml 0.90)/2 = mc 3.83
V8a = S8 x ml 1.50 = mq 5.83 x ml 1.50 = mc 8.75
V8b = (S8 x ml 1.22)/2 = (mq 5.83 x ml 1.22)/2 = mc 3.56
V9a = S9 x ml 1.50 = mq 5.83 x ml 1.50 = mc 8.75
V9b = (S9 x ml 1.05)/2 = (mq 5.83 x ml 1.05)/2 = mc 3.06
V10a = S10 x ml 1.50 = mq 19.89 x ml 1.50 = mc 29.84
V10b = (S10 x ml 1.05)/2 = (mq 19.89 x ml 1.05)/2 = mc 10.44
V11a = S11 x ml 1.50 = mq 5.83 x ml 1.50 = mc 8.75
V11b = (S11 x ml 1.05)/2 = (mq 5.83 x ml 1.05)/2 = mc 3.06
V12a = S12 x ml 1.50 = mq 5.83 x ml 1.50 = mc 8.75
V12b = (S12 x ml 1.22)/2 = (mq 5.83 x ml 1.22)/2 = mc 3.56
V13a = S13 x ml 2.72 = mq 8.52 x ml 2.72 = mc 23.17
V13b = (S13 x ml 0.90)/2 = (mq 8.52 x ml 0.90)/2 = mc 3.83
V14a = S14 x ml 1.50 = mq 17.85 x ml 1.50 = mc 26.78
V14b = (S14 x 2.12)/2 = (mq 17.85 x ml 2.12)/2 = mc 18.92
V15a = S15 x ml 1.50 = mq 34.71 x ml 1.50 = mc 52.07
V15b = (S15 x ml 2.12)/2 = (mq 34.71 x ml 2.12)/2 = mc 36.79
V16a = S16 x ml 1.50 = mq 20.29 x ml 1.50 = mc 30.44
V16b = (S16 x ml 2.12)/2 = (mq 20.29 x ml 2.12)/2 = mc 21.51
V17a = S17 x ml 1.50 = mq 9.56 x ml 1.50 = mc 14.34
V17b = (S17 x ml 2.12)/2 = (mq 9.56 x ml 2.12)/2 = mc 10.13
V18a = S18 x ml 1.50 = mq 9.61 x ml 1.50 = mc 14.42
V18b = (S18 x ml 2.12)/2 = (mq 9.61 x ml 2.12)/2 = mc 10.19
V19a = S19 x ml 1.50 = mq 9.53 x ml 1.50 = mc 14.30
V19b = (S19 x ml 2.12)/2 = (mq 9.53 x ml 2.12) /2 = mc 10.10
V20a = S20 x ml 1.50 = mq 9.53 x ml 1.50 = mc 14.30
V20b = (S20 x ml 2.12)/2 = (mq 9.53 x ml 2.12)/2 = mc 10.10
V21a = S21 x ml 1.50 = mq 9.95 x ml 1.50 = mc 14.93
V21b = (S21 x ml 2.12)/2 = (mq 9.95 x ml 2.12)/2 = mc 10.55
V22a = S22 x ml 1.50 = mq 9.95 x ml 1.50 = mc 14.93
V22b = (S22 x ml 2.12)/2 = (mq 9.95 x ml 2.12)/2 = mc 10.55
V23a = S23 x ml 1.50 = mq 120.84 x ml 1.50 = mc 181.26
V23b = (S23 x ml 2.12)/2 = (mq 120.84 x ml 2.12)/2 = mc 128.09
V24 = S24 x ml 2.15 = mq 18.58 x ml 2.15 = mc 39.95
V25 = S25 x ml 2.15 = mq 64.21 x ml 2.15 = mc 138.05
V26 = S26 x ml 2.20 = mq 6.88 x ml 2.20 = mc 15.14

V = 1310.07 mc

S.L. = mq 530.52 + mq 190.03 = mq 720.55

Alberto Marchetti ingegnere - Via A. Angeli,4 - 61121 Pesaro

STATO DI FATTO: CALCOLO S.U.L. E VOLUME
piano primo terzo

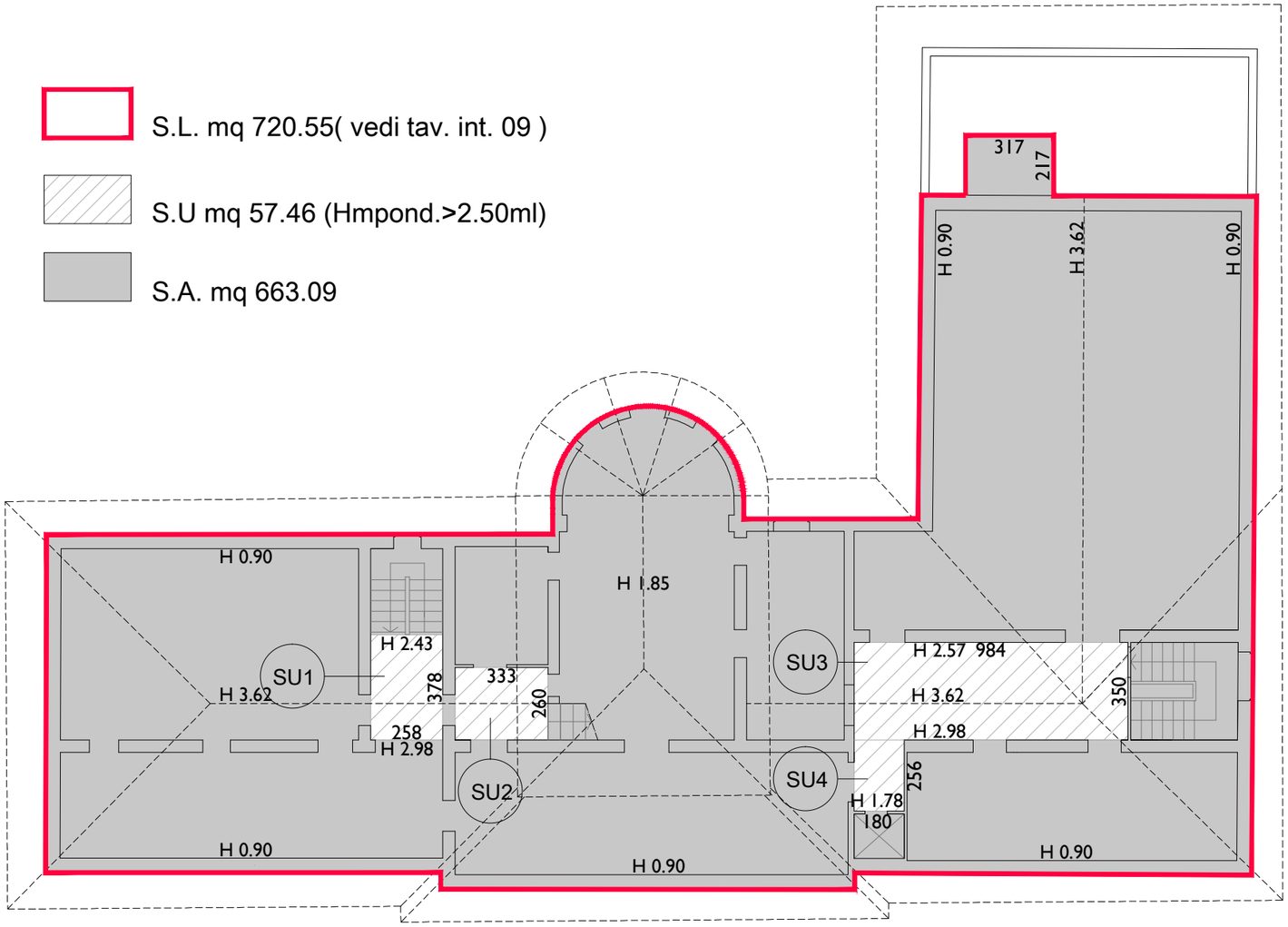
Tav. Int. 09

PORU

S.L. mq 720.55(vedi tav. int. 09)

S.U mq 57.46 (Hmpond.>2.50ml)

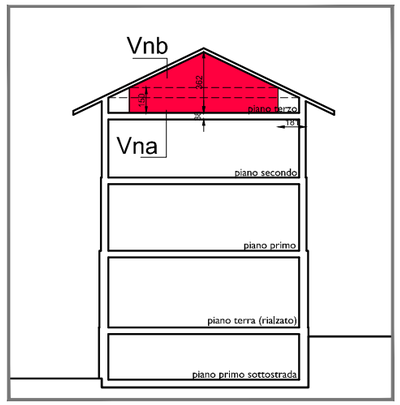
S.A. mq 663.09



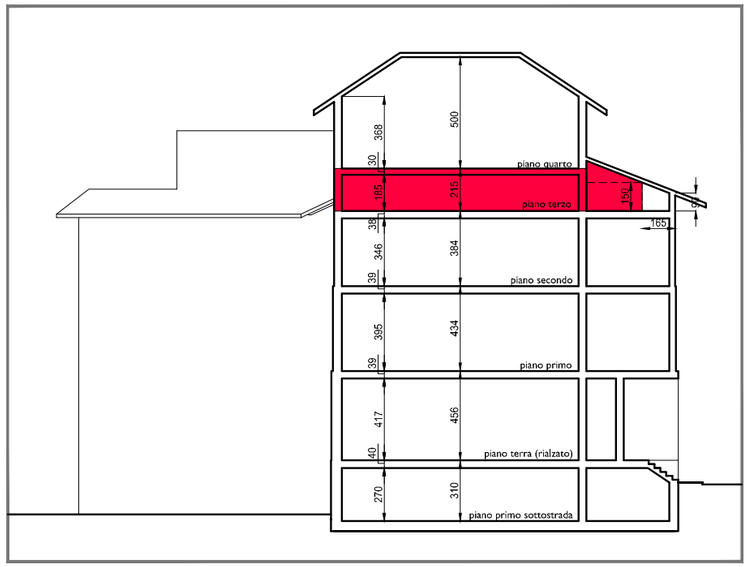
PIANO TERZO (SOFFITTA)

SU1 = ml 2.58 x ml 3.78 = mq 9.75
SU2 = ml 3.33 x ml 2.60 = mq 8.66
SU3 = ml 9.84 x ml 3.50 = mq 34.44
SU4 = ml 1.80 x 2.56 = mq 4.61

S.U. = mq 57.46



sezione schematica B-B



sezione schematica A-A

Alberto Marchetti ingegnere - Via A. Angeli,4 - 61121 Pesaro

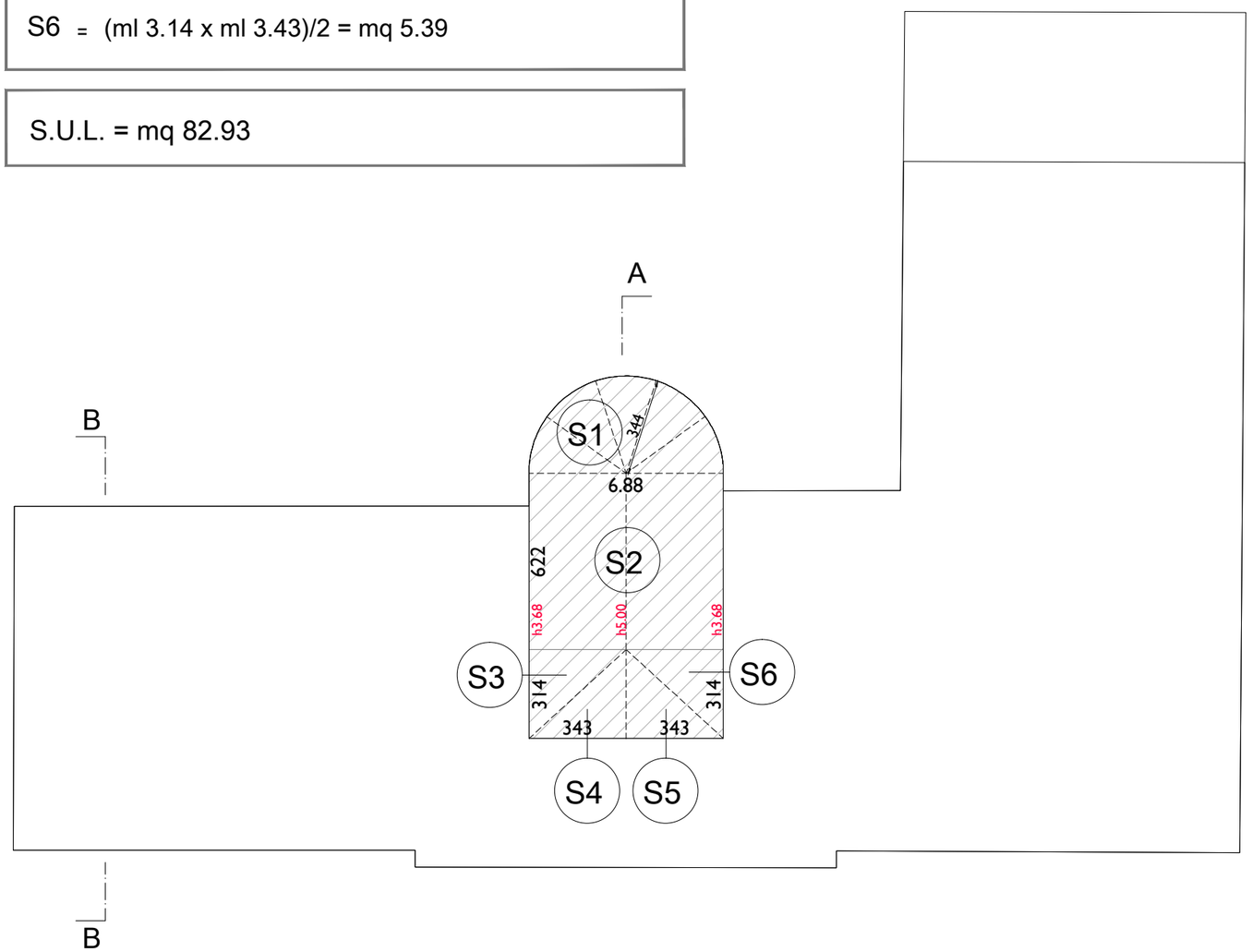
STATO DI FATTO: CALCOLO SUPERFICI
piano terzo

Tav. Int. 10

PORU

S1 = (π x ml 3.44 x ml 3.44)/2 = mq 18.58
S2 = ml 6.22 x ml 6.88 = mq 42.79
S3 = (ml 3.14 x ml 3.43)/2 = mq 5.39
S4 = (ml 3.14 x ml 3.43)/2 = mq 5.39
S5 = (ml 3.14 x ml 3.43)/2 = mq 5.39
S6 = (ml 3.14 x ml 3.43)/2 = mq 5.39

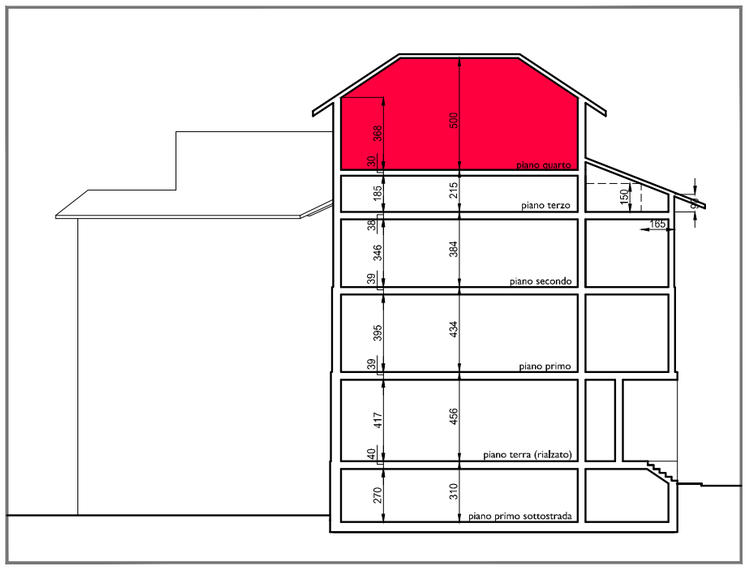
S.U.L. = mq 82.93



PIANO QUARTO

V1a = S1 x ml 3.68 = mq 18.58 x ml 3.68 = mc 68.37
V1b = (S1 x ml 2.02)/2 = ((π x ml 3.44² x ml 2.02) /3)/2 = mq 12.51
V2a = S2 x ml 3.68 = mq 42.79 x ml 3.68 = mc 157.47
V2b = (S2 x ml 2.02)/2 = (mq 42.79 x ml 2.02) /2 = mc 43.22
V3a = S3 x ml 3.68 = mq 5.39 x ml 3.68 = mc 19.84
V3b = (S3 x ml 2.02)/2 = (mq 5.39 x ml 2.02) /2 = mc 5.44
V4a = S4 x ml 3.68 = mq 5.39 x ml 3.68 = mc 19.84
V4b = (S4 x ml 2.02)/2 = (mq 5.39 x ml 2.02) /2 = mc 5.44
V5a = S5 x ml 3.68 = mq 5.39 x ml 3.68 = mc 19.84
V5b = (S5 x ml 2.02)/2 = (mq 5.39 x ml 2.02) /2 = mc 5.44
V6a = S6 x ml 3.68 = mq 5.39 x ml 3.68 = mc 19.84
V6b = (S6 x ml 2.02)/2(mq 5.39 x ml 2.02) /2 = mc 5.44

V = 382.69 mc



sezione schematica A-A

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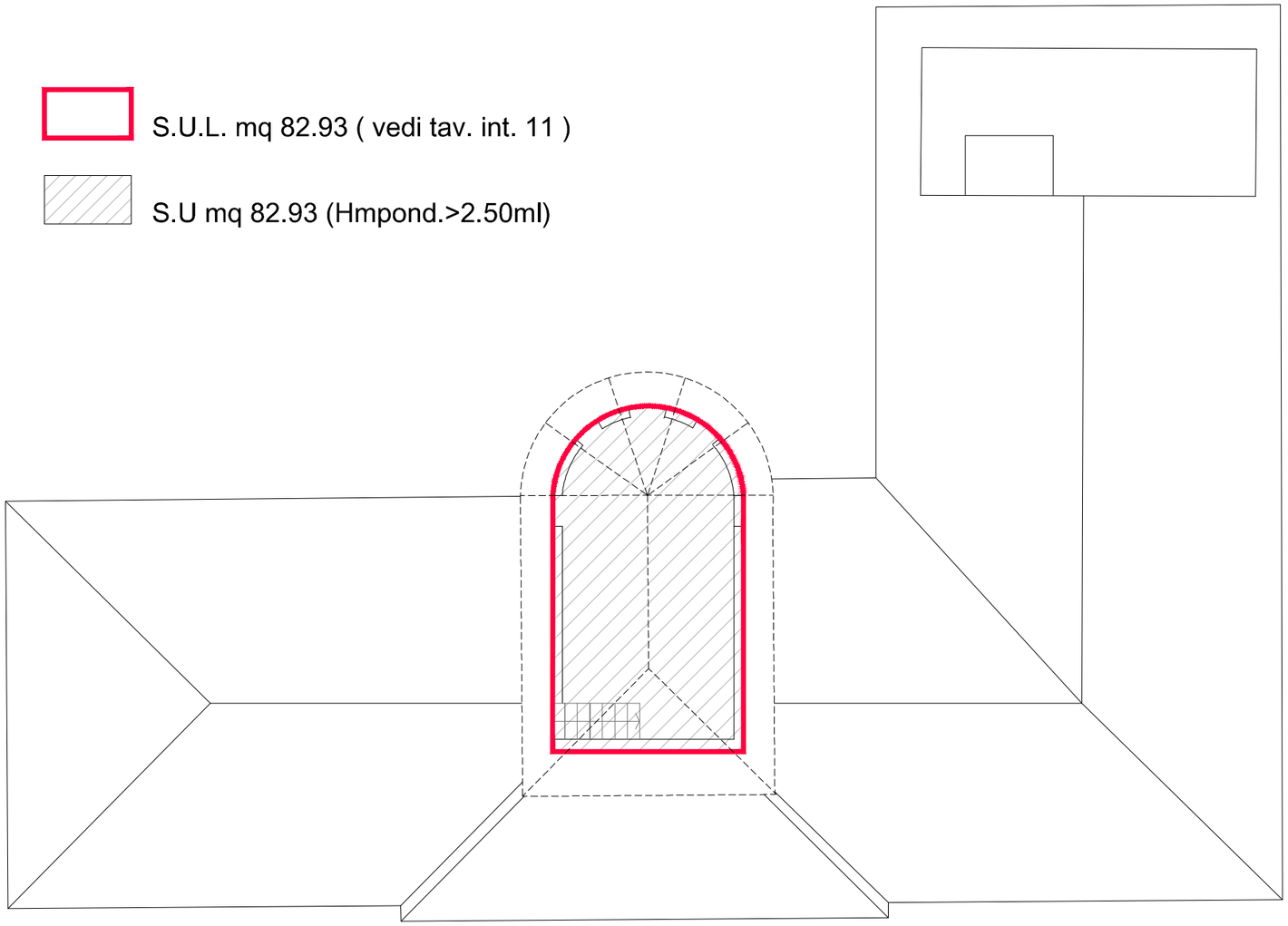
STATO DI FATTO: CALCOLO S.U.L. E VOLUME
piano primo quarto

Tav. Int. 11

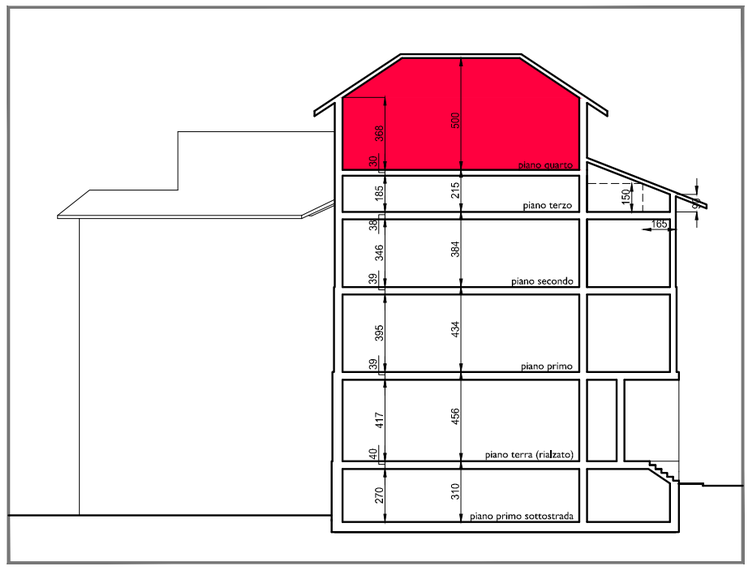
PORU

S.U.L. mq 82.93 (vedi tav. int. 11)

S.U mq 82.93 (Hmpond.>2.50ml)



PIANO PIANO QUARTO



sezione schematica A-A

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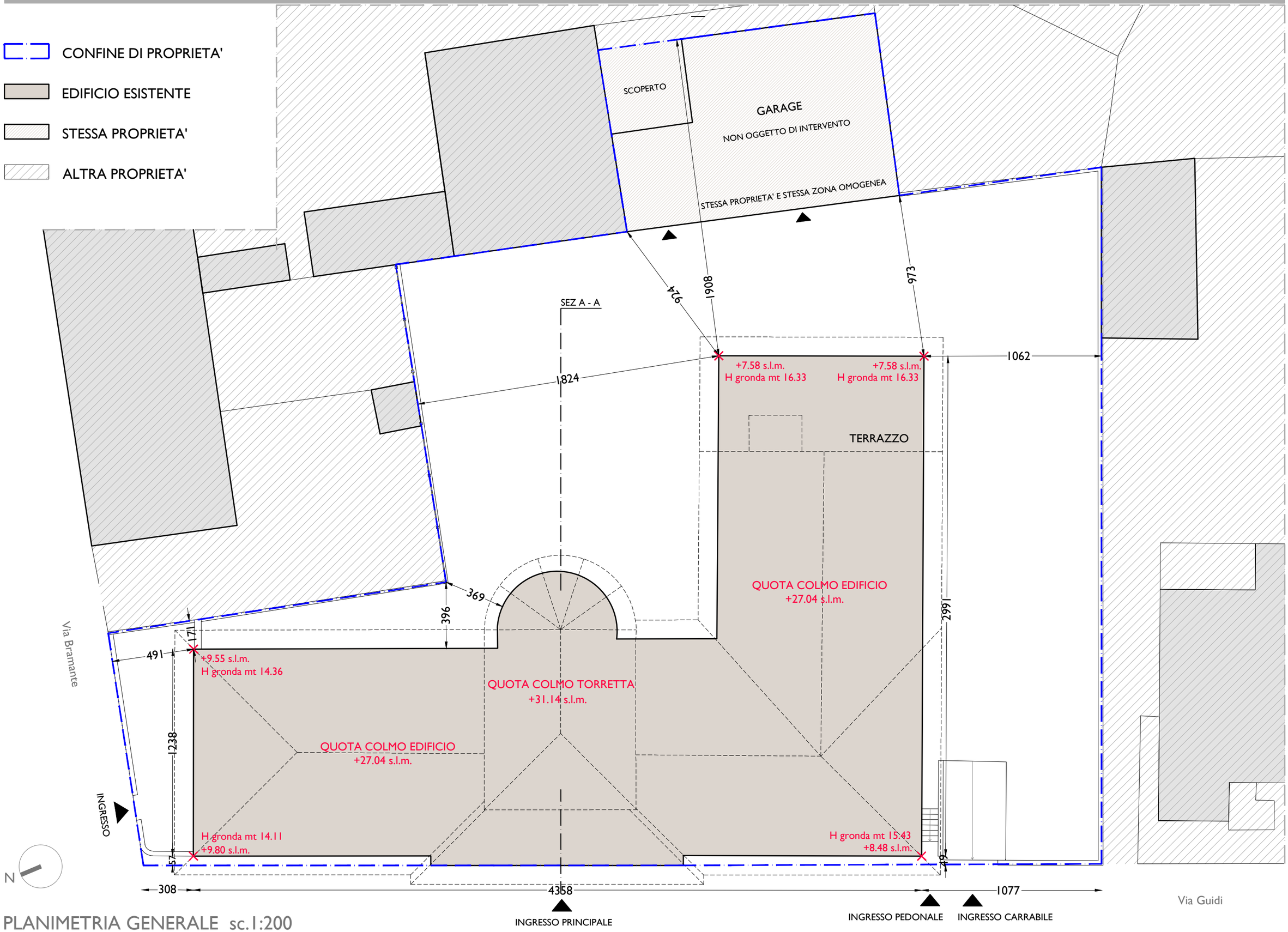
STATO DI FATTO: CALCOLO SUPERFICI
piano quarto

Tav. Int. 12

PORU



PLANIMETRIA GENERALE sc.1:200

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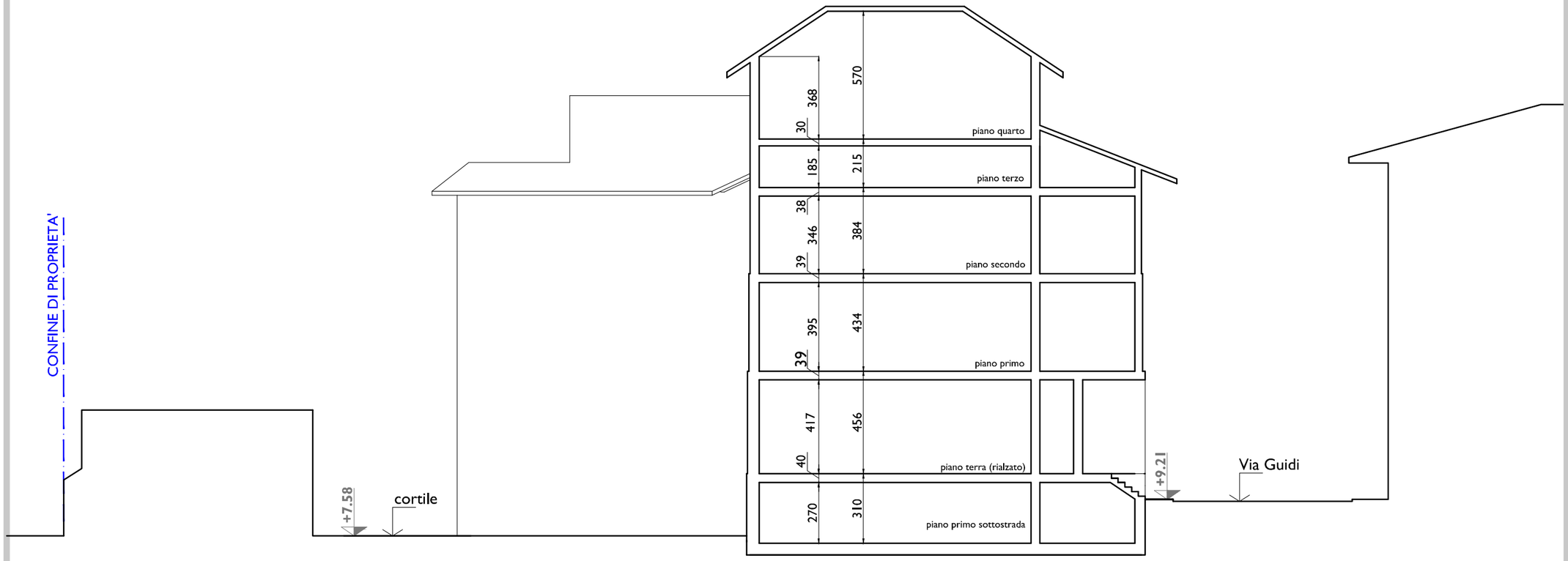
PLANIMETRIA STATO ATTUALE

Tav. Int. 13

PORU



SEZIONE SCHEMATICA A-A

STATO ATTUALE	S.U.(MQ)	S.A.(MQ)	S.U.L.(MQ)	H (MT)	V (MC)
piano primo sottostrada	741.11	54.01	795.12	2.70+0.40 = 3.10	2464.89
piano terra (rialzato)	747.99	47.13	795.12	4.17+0.39 = 4.56	3625.75
piano primo	755.72	31.28	787.00	3.95+0.39 = 4.34	3415.58
piano secondo	745.93	31.28	777.21	3.46+0.38 = 3.84	2984.49
piano terzo	57.46	663.09	530.52	VEDI TAVOLA	1310.07
piano quarto	82.93	--	82.93	VEDI TAVOLA	382.69
TOTALI	3131.14	826.79	3767.90		14183.47

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Tav. Int. 14 STATO ATTUALE: TABELLA RIEPILOGATIVA