IMPRESA ING. U. PATRIZI

CASE POPOLARI - BRINDISI

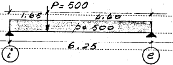
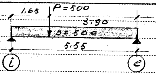
Calcoli di stabilità dei fabbr.
A, B e C

Roma, genn. 1956

FABBRICATO "A" 1°, 2° e 3° solaio

Cemento tipo 500

$\sigma = 50 / 1400$; $n = 10$

Solaio	l	p/p		Af/m	t
A	6,25	500/500			
			$m'_i = \frac{1}{8}$ — + — = 2980 si assume M_i = 2440		
			T_i = 0.62 — + 370 = 2310 x_e = 2.72		
			T_e = 0.38 — + 130 = 1300 M_m = 1850		
			M h d σ_f R σ_c k		
			App. int. 2400 × 0.9 = 2200 20.5 18,5 1400 28 50 {0.15 0.51	{2.76 9.45	16.7
			Comp. 1850 × 0.9 = 1670 20.5 18,5 1400 — — —	7.1	16.8
B	5,45	500	App. int. Come solaio A		
			Comp. $\frac{1}{14}$ — = 1060 20.5 18,5 1400 — — —	4.35	17.4
C	5,55	500/500			
			$m'_i = \frac{1}{8}$ — + — = 2420 si assume M_i = 1960		
			T_i = 0.627 — + 350 = 2090 x_e = 2.44		
			T_e = 0.373 — + 150 = 1190 M_m = 1490		
			M h d σ_f R σ_c k		
			App. Int. 1960 × 0.9 = 1760 20.5 18.5 1400 — — —	7.65	17
			Comp. 1490 × 0.9 = 1340 20.5 18.5 1400 — — —	5.6	17
D	4.75	500	App. int. Come solaio adiacente		
			Comp. $\frac{1}{14}$ — = 810 20.5 18.5 1400 — — —	3.3	17.6
E	4.75	500	h d σ_f R σ_c k		
			Comp. $\frac{1}{11}$ — = 1030 20.5 18.5 1400 — — —	4.25	17.3

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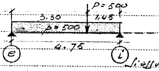
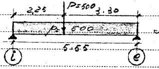
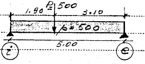
Solaio	l	p/P		Af/m	t
			M h d σ_f		
F	5.55	500	App. int. $\frac{1}{11}$ —— = 1400 20.5 18.5 1400	5.85	17.2
			Comp. $\frac{1}{13}$ —— = 1380 20.5 18.5 1400	4.9	17.2
G	4.75	500/500			
			Si assume M_i = 1400		
			T_e = 0.376 —— + 150 = 1040 x_e = 2.07		
			T_i = 0.624 —— + 350 = 1830 M_m = 1070		
			M h d σ_f		
			App. int. 1400 20.5 18.5 1400	5.85	17.2
			Comp. 1070 × 1.2 = 1280 20.5 18.5 1400	5.35	17.2
			Comp. bagni 1280 16.5 15.0 1400	6.7	13.7
H	5.55	500/500			
			Si assume M_i = 2000		
			T_i = 0.63 —— + 300 = 2050 x_e = 2.44		
			T_e = 0.37 —— + 200 = 1230 M_m = 1510		
			M h d σ_f		
			App. int. 2000 × 0.9 = 1800 20.5 18.5 1400	7.6	16.9
			C. bagni al max. x_e = 2.40		
			1500 × 0.9 = 1350 16.5 15 1400	7.1	13.6
I	5.00	500	Comp. $\frac{1}{11}$ —— = 1140 20.5 18.5 1400	4.75	17.3
J	5.00	500/500			
			T_i = 0.5 —— + 310 = 1560		
			x_e = 2.87		
			T_e = 0.5 —— + 190 = 1440		
			M_m = 3070		
			M h d σ_f		
			Comp. 2070 × 0.8 = 1660 20.5 18.5 1400	7.00	17.00

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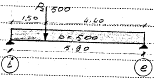
Solaio	l	p/P		Af/m	t
K	5.00	500/500			
			T_i = 0.5 —— + 370 = 1850		
			T_e = 0.5 —— + 130 = 1610		
			x_e = 3.22		
			M_m = 2590		
			M h d σ_f		
			Comp. 2590 × 0.8 = 2070 20.5 18.5 1400	8.85	16.8
			Comp. bagni (x_i max = 1.50) 1000 conven. 16.5 15 1400	5.20	13.8
L (a sb.)	0.90	650/150	Inc. $\frac{1}{2}$ —— + —— = 400 16.0 14.5 1400	2.09	13.7
M			16.0	a.l.	
N (a sb.)	1.30	650/150	M h d σ_f Inc. $\frac{1}{2}$ —— + —— = 740 16.0 14.5 1400	3.90	13.6

Travi –

Trave a

l = 2.65

50 × 35

Sol. C = 2050

" D 0.5 × 5.00 × 4.75 = 1190

P.pr. (50 × 35) = 410

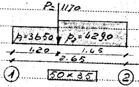
p = 3650

T = 0.5 × —— = 4840 τ –

M	b	h	d	σ_f	Af	t
App. e Comp. $\frac{1}{12}$ —— = 2140	50	35	32	1400	5.2	29.5

Trave b

l = 2.65



P) Muro 0.55 × 500 × 4.25 = P = 1170

p_1) Sol. C, D e P.pr. = p_1 = 3650

p_2) Sol. C = 2050

" G = 1830

P.pr. = 410 $p_2 - p_1$ = 640

p_2 = 4290

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$m_1 = \frac{1}{12}\text{—} + \frac{1}{12}\text{—} \times 1.29 + 420 = 2710 = M_1$

$m_2 = \frac{1}{12}\text{—} + \frac{1}{12}\text{—} \times 2.53 + 350 = 2780 = M_2$

	τ	t_0	Af	st.	Ast	Ap Fe
$T_1 = 0.5\text{—} + \text{—} \times 0.274 + 640 = 5740$						
$T_2 = 0.5\text{—} + \text{—} \times 0.726 + 530 = 6050$	4.1	1.41	10.4	φ6/19"	4.20	6.20

$x_3 = 1.41 \qquad M_m = -2780 + 4280 = 1500$

	M	b	h	d	σ_f	Af	t
App.	= 2780	50	35	32	1400	6.8	29.1
Comp.	1500 × 1.5 = 2270	50	35	32	1400	5.5	29.1

Trave c – come trave a

l. 2.65

Trave d

l = 3.20

50×30

Solaio K = 1850

P. pr. (50×30) = 370

p = 2220

$T = 0.5\text{—} = 3550 \quad \tau$

	M	b	h	d	σ_f	Af	t
App. e Comp.	$\frac{1}{12}\text{—} = 1900$	50	30	27	1400	5.3	24.9

Trave e

l = 2.55

50×16

Solaio L (650×0.9+150) 1.5 = 1100

P. pr. (50×16) = 200

p = 1300

$T.\ 0.5\text{—} = 1660 \quad \tau$

	M	b	h	d	σ_f	R	σ_c	μ	Af	t
App. e Comp.	$\frac{1}{12}\text{—} = 710$	50	16	14.5	1400	28	50	0.223 0.52	1.64 3.78	13.4

FABBRICATO "A" – Copertura

Cemento tipo 500

$\sigma = 50/1400 \qquad n = 10$

Solaio	l.	p.	M	h	d	σ_f	Af/m	t
A	6.30	600	App. int. $\frac{1}{11}\text{—} = 2160$	35	33	1400	4.86	31.1
			Comp. $\frac{1}{13}\text{—} = 1830$	35	33	1400	4.2	31.1
B	5.50	600	App. verso A $\frac{1}{11}\text{—} = 2160$	35	33	1400	4.86	31.1
			Comp. $\frac{1}{13}\text{—} = 1400$	35	33	1400	3.16	31.6
C	5.60	600	App. int. $\frac{1}{10}\text{—} = 1880$	35	33	1400	4.3	31.3
			Comp. $\frac{1}{13}\text{—} = 1450$	35	33	1400	3.31	31.3
D	4.80	600	App. Int. $\frac{1}{10}\text{—} = 1880$	35	33	1400	4.3	31.3
			Comp. $\frac{1}{14}\text{—} = 990$	35	33	1400	2.25	31.5
E	4.80	600	Comp. $\frac{1}{9}\text{—} = 1560$	35	33	1400	3.52	31.3
F	4.90 max	600	Comp. $\frac{1}{8}\text{—} = 1800$	35	33	1400	4.1	31.3
G	5.10	600	Comp. $\frac{1}{9}\text{—} = 1740$	35	33	1400	3.96	31.3
H	5.90	600	Comp. $\frac{1}{9}\text{—} = 2320$	35	33	1400	5.35	31.1

Copertura scala

l.	p.		M	h	d	σ_f	R	σ_c	Af/m	t
5.40	400	Comp.	$\frac{1}{8}\text{—} = 1460$	165	15	1250	25	50	8.60	136
4.50		Comp.	$\frac{1}{8}\text{—} = 1020$	16.5	15	1400	—	—	5.10	14.2

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Trave d

l = 2.75
40×35

Solaio C 0.55 × 600 × 5.6 = 1850
" D 0.55 × 600 × 4.8 = 1580
P.pr. (40×35) = 330
p = 3760

	τ	l_o	A_t	st.	Ast.	Ap $\sqrt{2}$
T = 0.5 — = 5270	4.5	1.37	8.7	ϕ6/22	35	5.2

	M	b	h	d	σ_f	A_f	t
Appoggio	$\frac{1}{15}$ — = 1900	40	35	32	1400	4.62	29.5
Camp.	$\frac{1}{11}$ — = 2590	(60)	35	32	1400	6.3	29.5

Trave - e

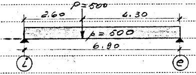
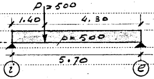
l = 3.30
40×35

Solaio H 0.5×600 × 5.9 = 1770
(sol.) = 240
P.pr. (40 × 40) = 370
p = 2380

T = 0.5 — = 3940 τ

	M	b	h	d	σ_f	A_f	t
Appog.	$\frac{1}{15}$ — = 1720	40	35	32	1400	4.15	29.5
Camp.	$\frac{1}{10}$ — = 2590	(55)	35	32	1400	6.28	29.5

FABBRICATO B - 1° e 2° solaio

Solaio	l	p/P		Af_m	t
A	6.90	500/500			
			$m'_a = \frac{1}{8}$ — + — = 3620 si assume M_a = 2700		
			T_i = 0.614 — + 310 = 2430 x_e = 3.05		
			T_e = 0.386 — + 190 = 1520 M_m = 2310		
			M h d σ_f		
			App. int. 2700 × 0.9 = 2430 23.5 21.5 1400	8.8	19.8
			Camp. 2310 × 0.9 = 2080 23.5 21.5 1400	7.5	19.8
			Camp. bagni (x_e max) = 1170 20.5 18.5 1400	885	16.8
B	4.90	500	App. int. come solaio adiacente		
			Camp. $\frac{1}{14}$ — = 860 23.5 18.5 1400	3.5	17.6
			App. int. verso A = 2430 20.5 18.5 1400	$\left\{\begin{matrix}6.3\\10.65\end{matrix}\right.$	16.9
C a sbalzo	1.30	650/150	Incastro $\frac{1}{2}$ — + — = 740 16.0 18.5 1400	3.9	13.6
D	5.70	500/500			
			$m'_i = \frac{1}{8}$ — + — = 2490		
			si assume M_i = 2200		
			T_i = 0.636 — + 380 = 2190 x_e = 2.32		
			T_e = 0.364 — + 120 = 1160 M_m = 1340		
			M h d σ_f R σ_c μ		
			App. int. = 2200 20.5 18.5 1400 28 50 $\left\{\begin{matrix}15\\51\end{matrix}\right.$	$\left\{\begin{matrix}2.76\\9.45\end{matrix}\right.$	16.7
			Camp. = 1340 20.5 18.5 1400 — — —	6.15	17.1
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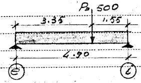
Solaio	l.	p/P					Af/m	t
E	4.90	500/500						
			$T_e = 0.5 \times — + 160 = 1390$ $x_e = 2.79$					
			$T_i = 0.5 \times — + 340 = 1570$ $M_m = 1940$					
			M	h	d	σf		
			Comp. 1940 × 0.8 = 1550	20.5	18.5	1400	6.45	17.2
			Com. bagni (x_e max) 1.70 =	20.5	18.5	1400	8.45	16.8
G a sbalzo	1.50 max	650/150	Incastro $\frac{1}{2}$ — + — = 960	16	14.5	1400	5.15	13.4
	1.10 min.	650/150	Incastro $\frac{1}{2}$ — + — = 560	16	14.5	1400	2.95	13.7

Travi

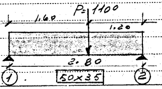
Trave a
l = 3.40
50×40

Solaio B 0.55×500×4.90 = 1350
Solaio D — = 2190
P.pr. (50×40) = 470
p = 4010

	τ	l_0	A_t	st.	$A_{st.}$	$A_p\sqrt{2}$
T = 0.5 × —— = 6800	4.1	1.70	12.3	φ6/19"	5.05	7.25

	M	b	h	d	σf	Af	t
App. e Camp.	$\frac{1}{12}$ —— = 3850	50	40	37	1400	8.2	33.6

Trave b



P/Muro 0.5×500×4.4 = 1100

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p) Solaio B 0.55×500×4.9 = 1350
Solaio D = 2190
P.pr. (50×35) = 420
p = 3960

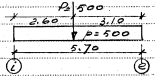
$m'_1 = \frac{1}{12}$ — + 320 = 2910 = M_1
$m'_2 = \frac{1}{12}$ — + 480 = 3020 = M_2

	τ	l_0	A_t	st	$A_{st.}$	$A_p\sqrt{2}$
T_1 = 0.496 — + 470 = 5970	4.1	1.51	11.4	φ6/16"	5.3	6.1
T_2 = 0.504 — + 630 = 6220	4.3	1.29	11.4	φ6/16"	4.6	6.8

$x_1 = 1.51$ $M_m = -2910 + 4510 = 1600$

	M	b	h	d	σf	Af	t
App.	= 3020	50	35	32	1400	7.45	29.00
Camp.	1600×1.5 = 2400	50	35	32	1400	5.9	29

Solaio F

Solaio	l	p/P	M	h	d	σf	Af/m	t
F	5.70	500/500						
			$m'_i = \frac{1}{8}$ — + — = 2590					
			si assume M_i = 1900					
			T_i = 0.617 — + 270 = 2030					
			T_e = 0.383 — + 230 = 1320					
			$x_e = 2.64$ $M_m = 1750$					
			App. int. 1900 × 0.9 = 1710	20.5	18.5	1400	7.2	17.0
			Camp. bagni 1750 × 0.8 = 1400	16.5	15	1400	7.4	13.5

FABBRICATO B – Copertura –

Cemento 500 $\sigma = 50/1400$ $n = 10$

Solaio	l	p	M	h	d	σ_f	A_f/m	t
A	6.80	600	App. int. $\frac{1}{11}$ —— = 2540	35	33	1400	5.83	31.2
			Comp. $\frac{1}{13}$ —— = 2140	35	33	1400	4.9	31.2
B	5.00	600	App. int.	vedi solaio adiacente				
			Comp. $\frac{1}{14}$ —— = 1070	35	33	1400	2.44	31.4
C	5.70	600	App. int. $\frac{1}{10}$ —— = 1950	35	33	1400	4.5	31.0
			Comp. $\frac{1}{13}$ —— = 1500	35	33	1400	3.45	31.0
D	4.90	600	Comp. $\frac{1}{9}$ —— = 1600	35	33	1400	3.66	31.3
E	5.00	600	App. int.	vedi solaio adiacente				
			Comp. $\frac{1}{14}$ —— = 1070	35	33	1400	2.44	31.4
F	5.00	600	Comp. $\frac{1}{12}$ —— = 1250	35	33	1400	2.84	31.3
G a sbalzo	1.00	650/150	Incastro $\frac{1}{2}$ —+— = 330	10	8.5	1400	3.02	7.8
			Solaio copertura scala					
Cop. scala	2.85	400	Comp. $\frac{1}{8}$ — = 410	16.5	15	1400	2.06	14.2

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Travi

Trave d

l = 3.40

40 × 40

Solaio B 0.55 × 600 × 5.00 = 1650
" C 0.55 × 600 × 5.70 = 1880
P.pr. (40 × 40) = 370
p = 3900

	τ	l_0	A_t	ϕ_t	A_{st}	$A_p\sqrt{2}$
T = 0.5 —— = 6620	4.9	1.70	11.9	ϕ6/20"	4.8	7.1

M	b	h	d	σ_f	A_f	t
App. $\frac{1}{15}$ —— = 3000	40	40	37	1400	6.35	33.9
Comp. $\frac{1}{10}$ —— = 4500	(60)	40	37	1400	9.54	33.8

Trave e

l = 2.75

40 × 35

Solaio C 0.55 × 600 × 5.70 = 1880
" E 0.52 × 600 × 5.00 = 1560
P.pr. (40 × 35) = 330
p = 3770

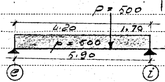
	τ	l_0	A_t	ϕ_t	A_{st}	$A_p\sqrt{2}$
T = 0.5 —— = 5180	4.4	1.37	8.6	ϕ6/22"	3.5	5.1

M	b	h	d	σ_f	A_f	t
App. $\frac{1}{15}$ —— = 1900	40	35	32	1400	4.6	29.5
Comp. $\frac{1}{10}$ —— = 2850	(60)	35	32	1400	6.9	29.5

FABBRICATO C - 1° e 2° solaio

Cemento tipo 500 $\sigma = 50/1400$ $n = 10$

Solaio	l	p/P	M	h	d	σ_f	A_f cm^2/m	t
A sbalzo	1,00	650 P=500	Incastro $\frac{1}{2}$ — + — = 825	16	14.5	1400	4.4	13.4
A1 sbalzo	1.70	650 P=150	Incastro $\frac{1}{2}$ — + — = 1200	16	14.5	1400	6.5	13.2
B	4.90	500	App. est. Come solaio A e A1					
			App. int. $\frac{1}{10}$ — = 1200	20,5	18,5	1400	4.95	17.4
			Camp. $\frac{1}{14.5}$ — = 830	20.5	18.5	1400	3.45	17.4
C	4.90	500	App. int. $\frac{1}{10}$ — = 1200	20.5	18.5	1400	4.95	17.4
			Camp. $\frac{1}{13.5}$ — = 890	20.5	18.5	1400	3.7	17.2
D	5.90	500/500						



$m'_i = \frac{1}{8}$ — + — = 2700

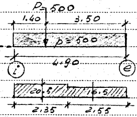
Si assume $M_i = 2300$

$T_e = 0.37$ — $+ 150 = 1240$ $\qquad x_e = 2.49$

$T_i = 063$ — $+ 350 = 2210$ $\qquad M_m = 1550$

	M	h	d	σ_f	R	σ_c	μ		t
App. int.	= 2300	20.5	18.5	1400	28	50	0.24 0.52	4.65 9.65	17.1
Camp.	1500 × 1.2 = 1860	20.5	185	1400	—	—	—	7.90	16.9

Solaio	l	p/P
E	4.90	500/500



$M_i = 2300$ (vedi sol. D)

$T_i = 0.69$ — $+ 360 = 2050$

$T_e = 0.31$ — $+ 140 = 900$

$x_e = 1.80$

$M_m = 810$

	M	h	d	σ_f	R	σ_c	μ		t
App. int.	= 2300	205	185	1400	28	50	0.24 0.52	4.65 9.65	17.1
Camp.	810 × 1,3 = 1050	16.5	15	1400	—	—	—	5.45	13.7

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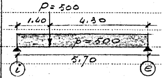
Solaio	l	p/P	M	h	d	σ_f	A_f cm^2/m	t
F	4.90	500	Camp. $\frac{1}{10}$ — = 1200	20.5	8.5	1400	5.00	17.2
G sbalzo	0.80	650/150	Incastro $\frac{1}{2}$ — + — = 330	10.0	8.5	1400	3.02	7.8
H	5.70	500/500	App. int. $\frac{1}{10}$ — = 1620	20.5	18.5	1400	6.85	17.00
			Camp. $\frac{1}{13.5}$ — = 1200	20.5	18.5	1400	5.00	17.2
L	5.70	500/500						



(non continuo)

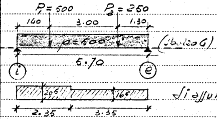
$T_i = 0.5$ — $+ 380 = 1805$

$T_e = 0.5$ — $+ 120 = 1545$

$x_e = 3.1$ $\qquad M_m = 2400$

	M	h	d	σ_f	A_f cm^2/m	t
Camp.	2400 × 0.8 = 1920	20.5	18.5	1400	8.1	16.9

Solaio	l	p/P
I	5.70	500/{500 250}



Si assume $M_i = 2000$

$m'_i = \frac{1}{8}$ — $+ 470 + 150 - 150 = 2510$

$T_i = 0.614$ — $+ 380 + 60 = 2190$ $\qquad x_e = 2,30$

$T_e = 0.386$ — $+ 120 + 190 = 1410$ $\qquad M_m = -330 + 1320 + 330 = 1320$

	M		h	d	σ_f	R	σ_c	A_f cm^2/m	t
App. int.	2000	=	20.5	18.5	1400	-	-	8.5	16.8
Camp.	1320	=	16.5	15	1260	25.2	50	8.45	13.7

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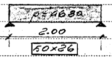
Zone rinforzate sotto i tramezzi - Cordolo +2 travetti

$\Delta p = 500/1.8 = 280$

$\Delta M = \frac{1}{10}\, 280 \times 5.7^2 = 900 \qquad \Delta A_f/m = \begin{cases} 3.75 \text{ per } h = 20.5 \\ 4.7 \quad " \quad h = 16.5 \end{cases}$

Piattabande interne



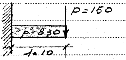
p) T_i solaio D = 2210
T_i " E o I = 2190
P.pr. (50×26) = 280
p = 4680

	τ	l_o	A_t	st.	A_{st}	Ap l E
T = 0.5 —— = 4680	4.5	1.00	7.95	φ6/17	3.3	4.65

	M	b	h	d	σ_f	A_f	t
App. e Camp.	$\frac{1}{12}$ —— = 1550	50	26	23	1400	5.3	20.9

SCALA

Soletta rampante a sbalzo.



p) sovracc. acc. = 350
gradini in tufo = 230
P.pr. 10 cm. = 250
p = 830

	M	h	d	σ_f	A_f/m	t
Incastro	$\frac{1}{2}$ —+— = 670	12	10.5	1400	5.00	9.5
	oppure	13.5	12.0	1400	4.35	11.0

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Pianerottoli

l = 3.00 p = 830 h = 12

	M	h	d	σ_f	A_f/m	t
App.	$\frac{1}{12}$ —— = 620	12	10.5	1400	4.6	9.6
Camp.	$\frac{1}{15}$ —— = 500	12	10.5	1400	3.75	9.6

Pianerottoli a sbalzo

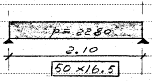
1°) l = 1.40 p = 830 P = 150

	M	h	d	σ_f	R	σ_c	μ	A_f/m	t
Incastro	$\frac{1}{2}$ —+— = 1020	13.5	12	1350	27	50	0.32 0.58	3.85 6.95	10.8

2°) l = 1.30

	M	h	d	σ_f				A_f/m	t
Incastro	$\frac{1}{2}$ —+— = 900	13.5	12	1400	–	–	–	5.95	10.8

Trave in spessore di solaio (esterno)



p = solaio I (Te) = 1410
Balcone 4 (0.8×65×150) = 670
P.pr. (50×16.5) = 200

T = 0.5 —— = 2390 τ —

	M	b	h	d	σ_f	R	σ_c	μ	A_f	t
App. e Camp.	$\frac{1}{12}$ —— = 840	50	165	145	1350	27	50	0.64 0.65	4.65 4.70	12.8

FABBRICATO C - Copertura

Cemento tipo 500 $\sigma = 50/1400$ $n = 10$

Solaio	l	p	M	h	d	σf	A_f/m	t
A	4.90	600	p) P. pr. = 220 Sovracc. = 200 Par. pendenze = 180 p = 600					
			App. verso B $\frac{1}{10}$ — = 1440	35.0	33	1400	3.25	31.5
			App. verso C $\frac{1}{10}$ — = 2020	35	33	1400	4.64	31.3
			Camp. $\frac{1}{13}$ — = 1110	35	33	1400	2.51	31.5
B	4.90	600	App. verso A — = 1440	35.0	33	1400	3.25	31.5
			Camp. $\frac{1}{14}$ — = 1030	35.0	33	1400	2.34	31.5
C	5.80	600	App. int. $\frac{1}{10}$ — = 2020	35	33	1400	4.64	31.3
			Camp. $\frac{1}{13}$ — = 1550	35	33	1400	3.55	31.3
D	4.90	600	Camp. $\frac{1}{9}$ — = 1600	35	33	1400	3.66	31.3
E	5.70	600	Camp. $\frac{1}{13}$ — = 1550	35	33	1400	3.55	31.3
F	5.70	600	Camp. $\frac{1}{9}$ — = 2160	35	33	1400	4.96	31.3
G 16x20	1.00	600/ /200	Incastro $\frac{1}{2}$ — + — = 500	11	9.5	1400	4.1	8.7

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Travi

Trave a

l = 1.70

40x35

Solaio E 0.55 × 600 × 5.70 = 1880

Solaio C 0.55 × 600 × 5.80 = 1920

P. pr. (40 × 35) = 330

p = 4130

T = 0.5 — = 3500 $\underline{\tau}$

	M	b	h	d	σf	Af	t
App. $\frac{1}{14}$ —	= 850	40	35	32	1400	2.03	29.9
Camp. $\frac{1}{10}$ —	= 1170	40	35	32	1400	2.8	29.9

Trave b

l = 1.87

40x35

Solaio E 0.45 × 600 × 5.70 = 1540

Muro = 200

P. pr. (40 × 35) = 330

p = 2070

T = 0.5 — = 1940 $\underline{\tau}$

	M	b	h	d	σf	Af	t
App. $\frac{1}{14}$ —	= 520	40	35	32	1400	1.23	30.1
Camp. $\frac{1}{10}$ —	= 730	40	35	32	1400	1.73	30.1

Solaio Copertura scala

l = 2.85 p. = 400

	M	h	d	σf	Af	t
Camp. $\frac{1}{8}$ —	= 410	16.5	15	1400	2.06	14.2