

DESPIECE VIGAS SEGUNDO PISO BLOQUE C ESC.:1:100

Resumen Acero

Plano de pórticos	Long. total (m)	Peso+10% (kg)	Total
AH-420 Ø6	8863.8	2164	2164
AH-500 Ø8	1445.5	627	
Ø10	556.7	378	
Ø12	3751.9	3664	
Ø16	1808.5	3140	
Ø20	32.0	87	7896
Total			10060

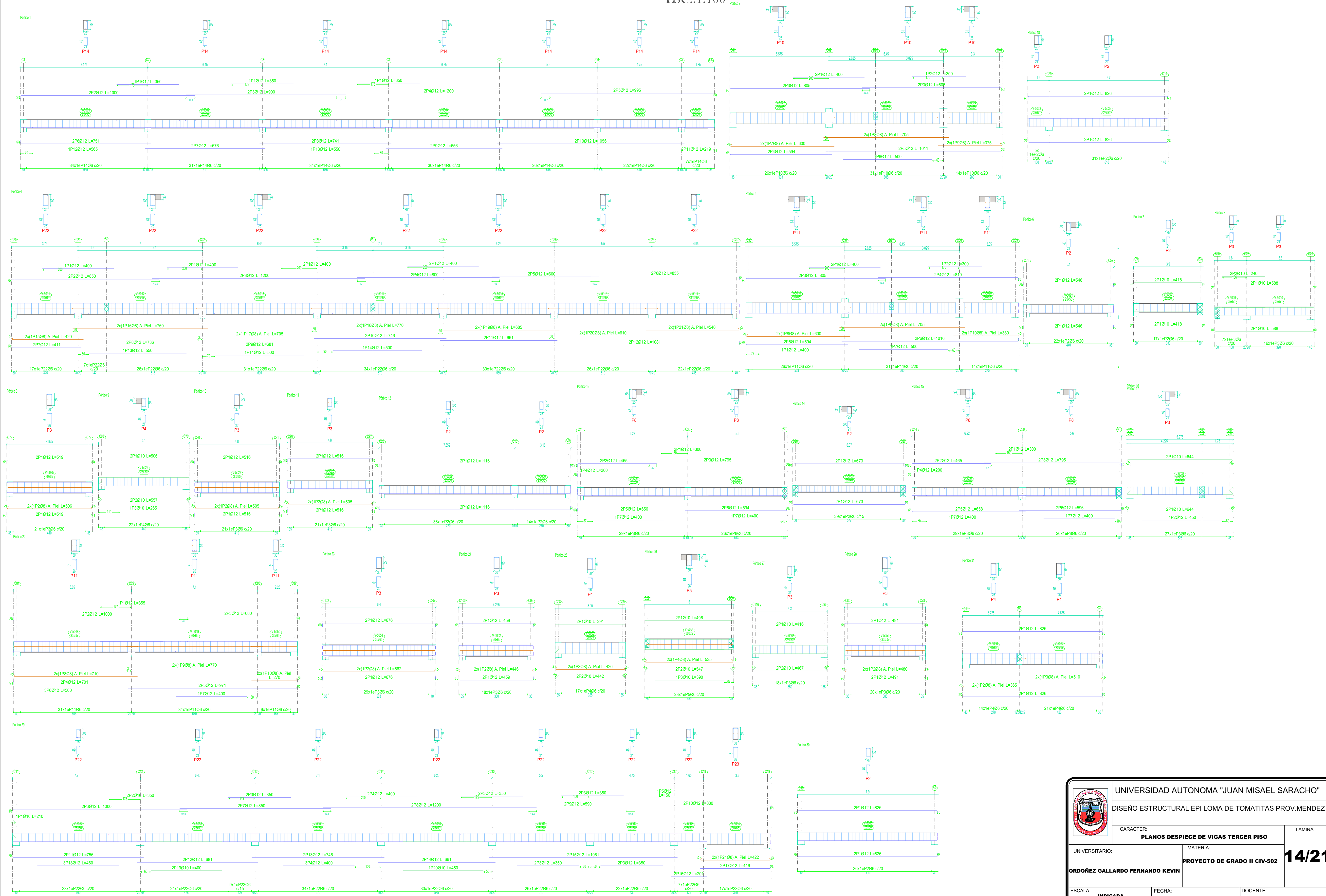
2P
Despiece de vigas
Hormigón: H21MPA NB1225001
Acero en barras: AH-500
Acero en estribos: AH-420
Escala pórticos 1:100
Escala secciones 1:100
Escala huecos 1:100

Resumen Acero		Long. total	Peso+10%	Total
Plano de pórticos		(m)	(kg)	
AH-420	Ø6	8863.8	2164	2164
AH-500	Ø8	1445.5	627	
	Ø10	556.7	378	
	Ø12	3751.9	3664	
	Ø16	1808.5	3140	
	Ø20	32.0	87	
Total				10060

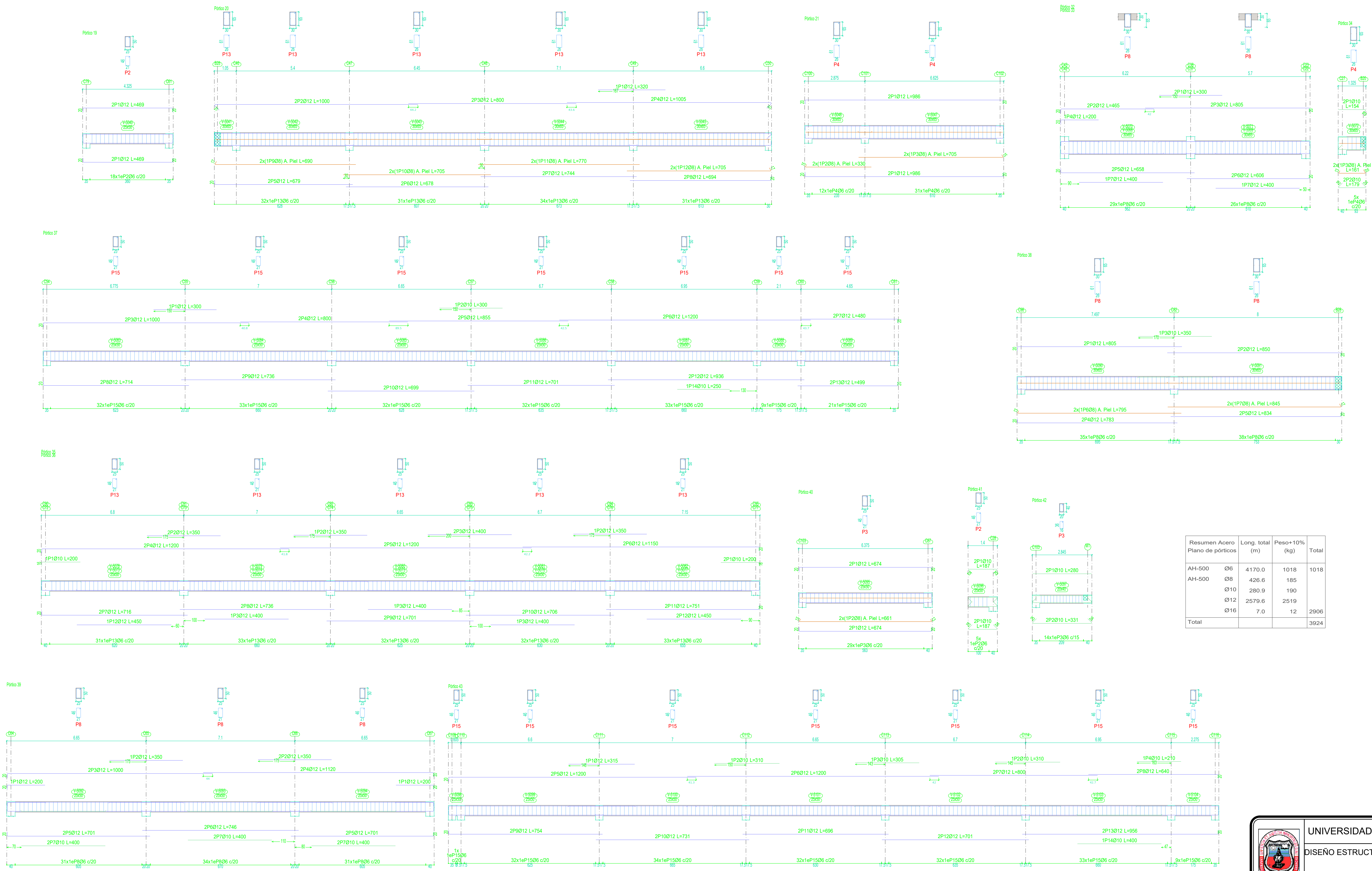
2P
Despiece de vigas
Hormigón: H21MPA NB1225001
Acero en barras: AH-500
Acero en estribos: AH-420
Escala pódicos 1:100
Escala secciones 1:100
Escala huecos 1:100

	UNIVERSIDAD AUTONOMA "JUAN MISAEL SARACHO"		
	DISEÑO ESTRUCTURAL EPI LOMA DE TOMATITAS PROV.MENZEZ		
CARACTER: PLANOS DESPIECE DE VIGAS 2DO PISO B-C		LAMINA	
UNIVERSITARIO: ORDÓÑEZ GALLARDO FERNANDO KEVIN	MATERIA: PROYECTO DE GRADO II CIV-502	13/21	
ESCALA: INDICADA	FECHA: T.JA. 19/09/2024	DOCENTE: ING. CARRASCO ARNOLD PAUL DENNIS	

DESPIECE VIGAS PLANTA TERCER PISO
ESC.:1:100



DESPIECE VIGAS PLANTA TERCER PISO
ESC.:1:100



Resumen Acero	Long. total	Peso+10%	Total
Plano de pórticos	(m)	(kg)	
AH-500	Ø6	4170.0	1018
AH-500	Ø8	426.6	185
	Ø10	280.9	190
	Ø12	2579.6	2519
		7.0	12
Total			3924

UNIVERSIDAD AUTONOMA "JUAN MISAEL SARACHO"
DISEÑO ESTRUCTURAL EPI LOMA DE TOMATITAS PROV.MENDEZ

CARACTER:
PLANOS DESPIECE DE VIGAS TERCER PISO 2

LAMINA

UNIVERSITARIO:
ORDÓÑEZ GALLARDO FERNANDO KEVIN

MATERIA:
PROYECTO DE GRADO II CIV-502

ESCALA:
INDICADA

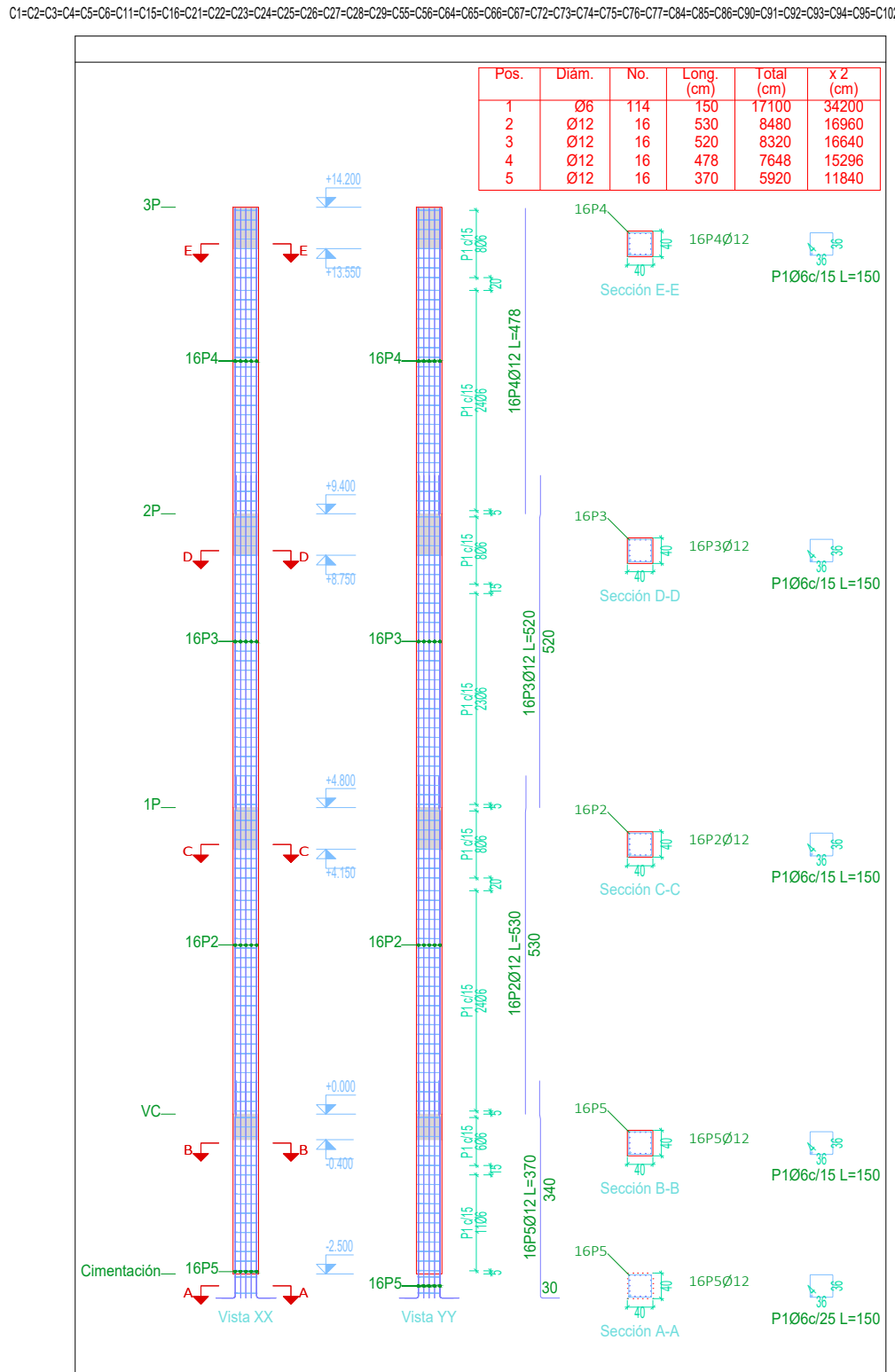
FECHA:
T.JA. 19/09/2024

DOCENTE:
ING. CARRASCO ARNOLD PAUL DENNIS

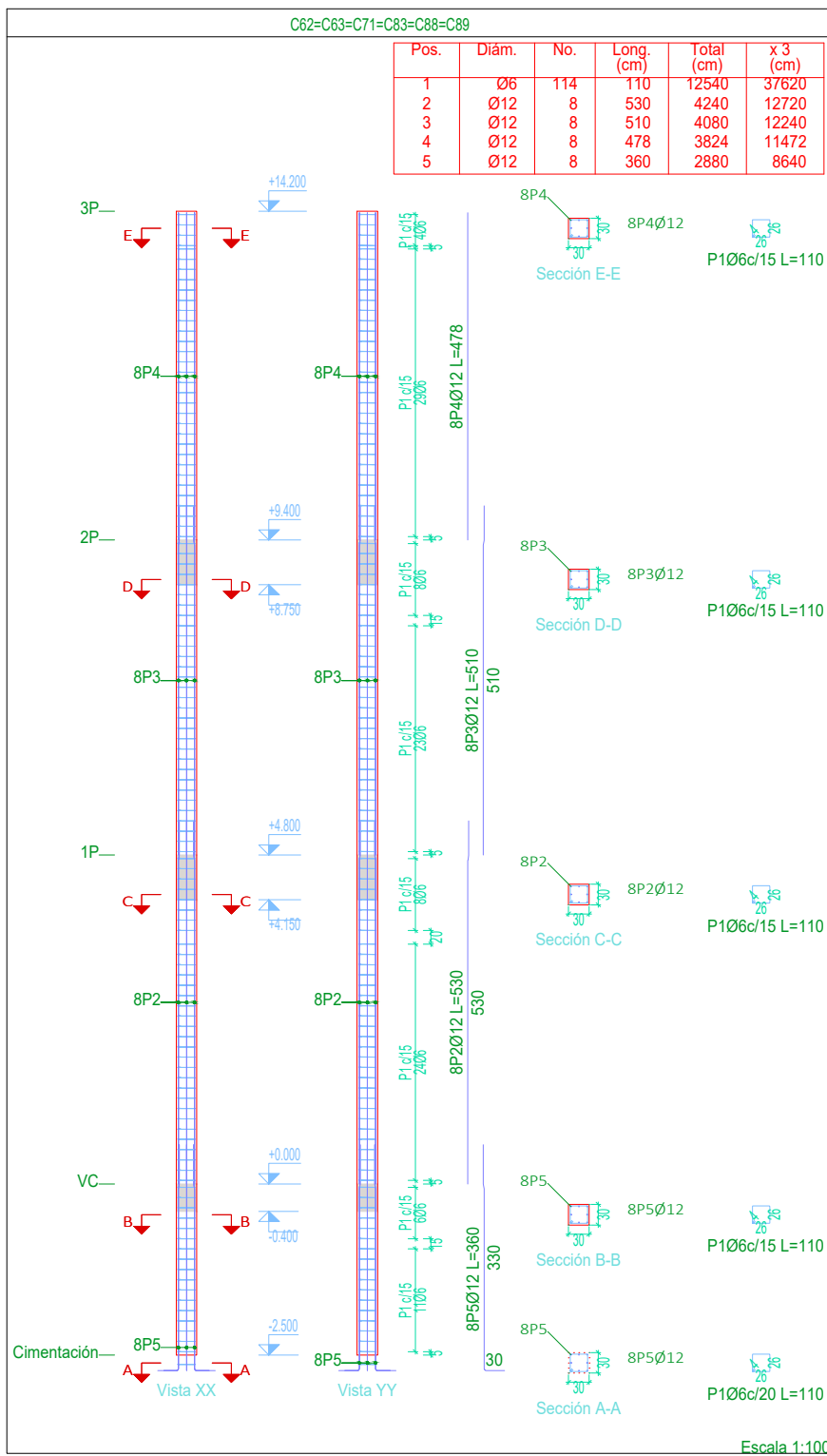
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DESPIECE VIGAS PLANTA TERCER PISO
ESC.:1:100

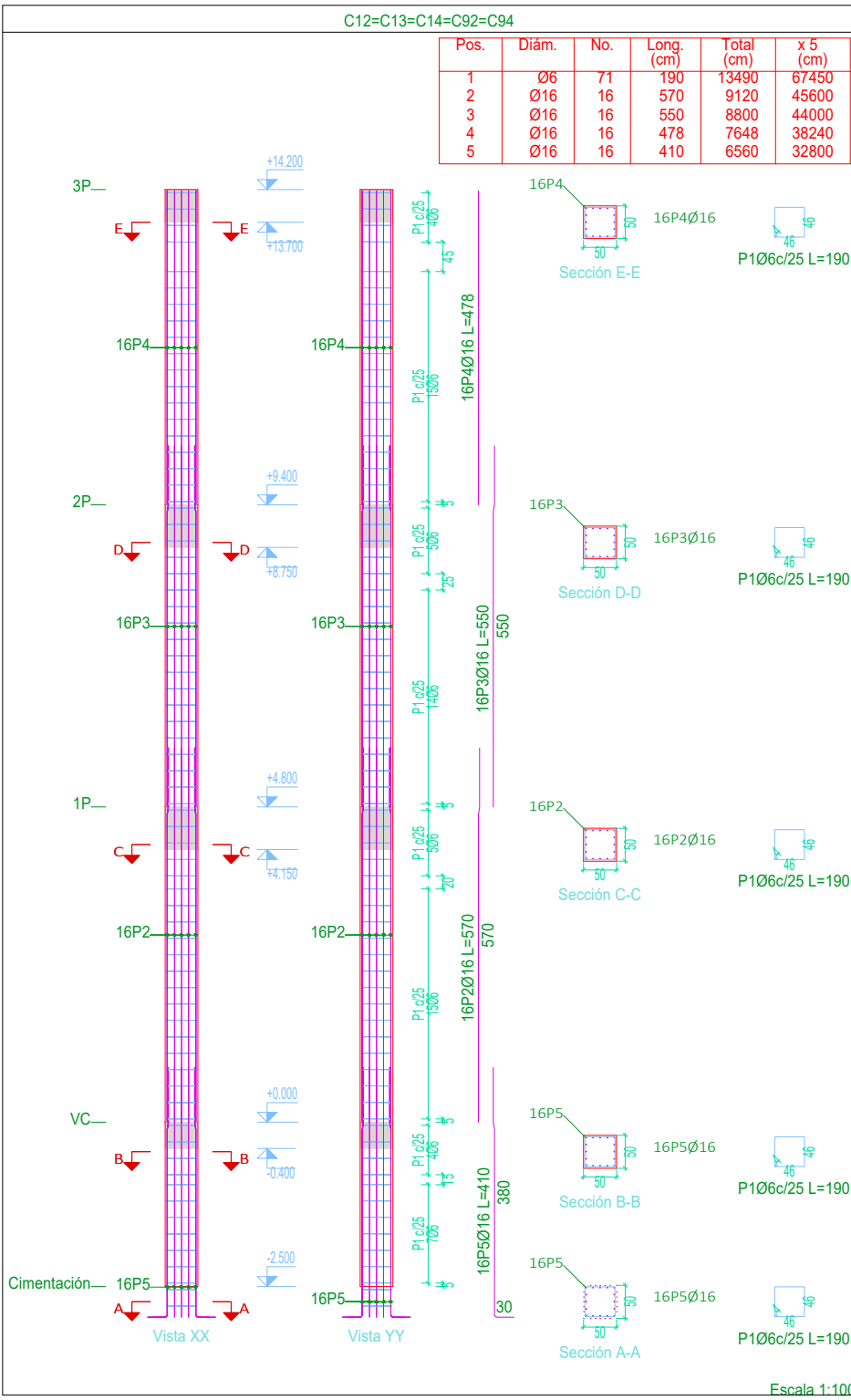
GRUPO 1 COLUMNAS



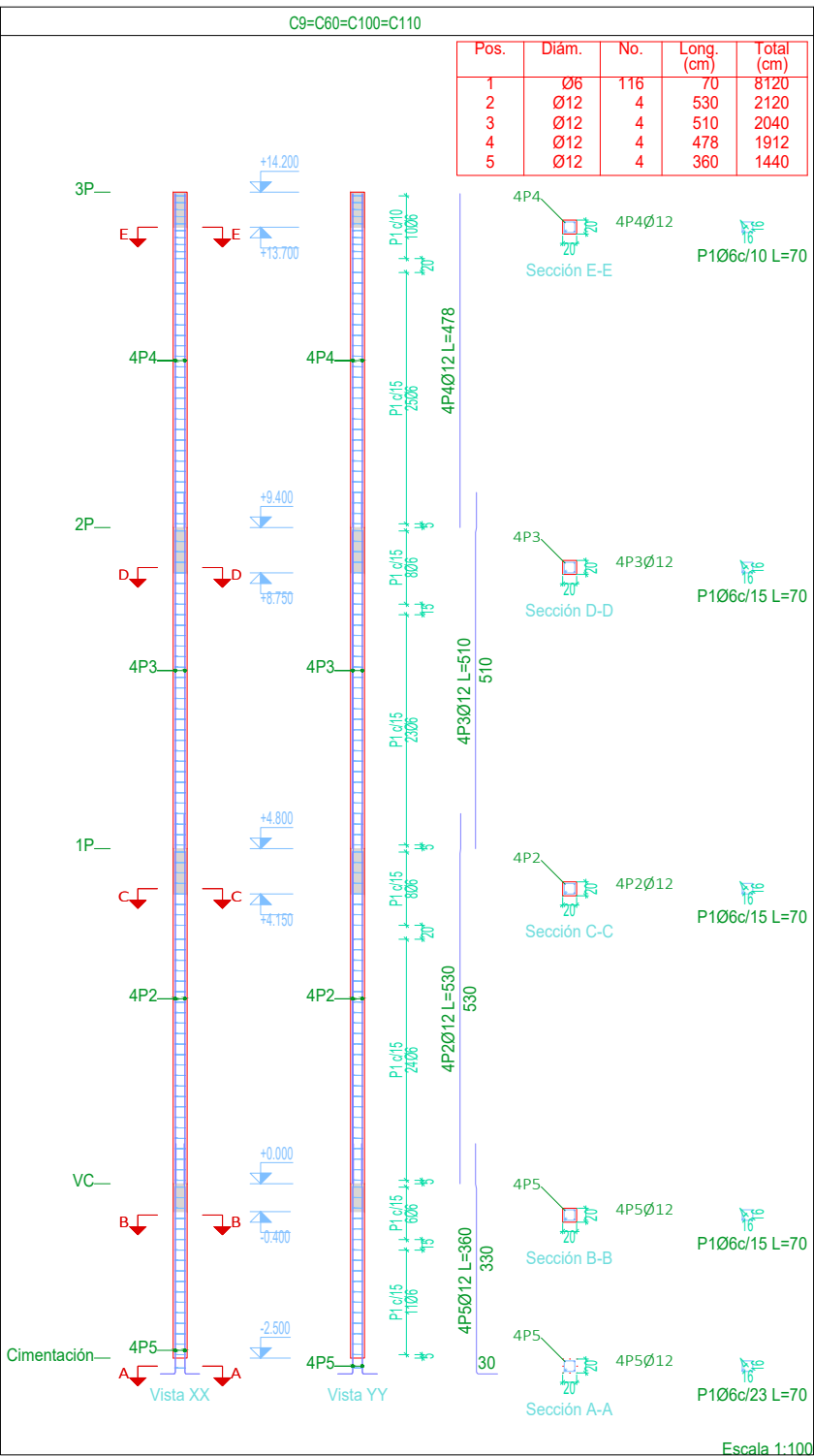
GRUPO 3 COLUMNAS



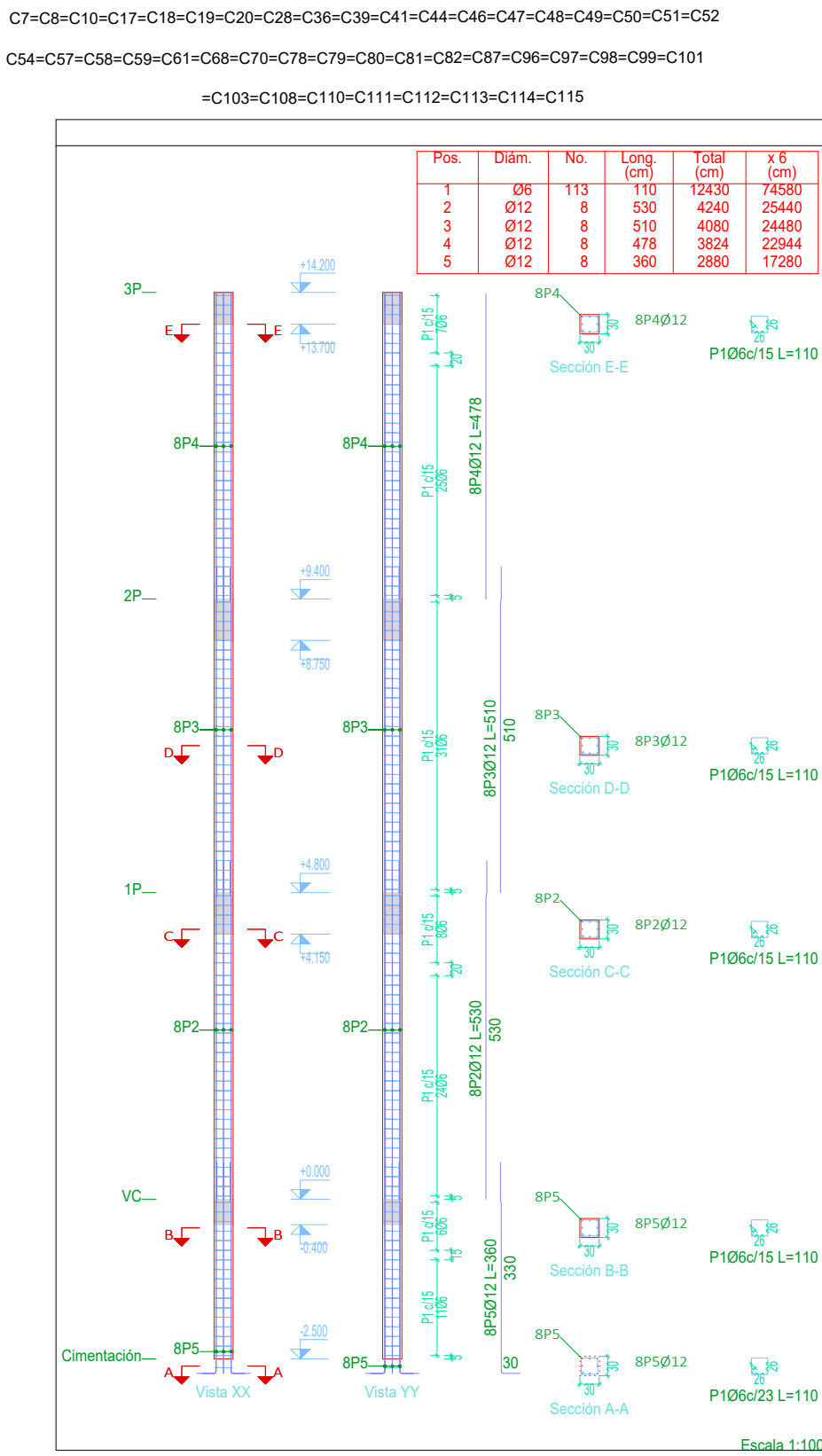
GRUPO 2 COLUMNAS



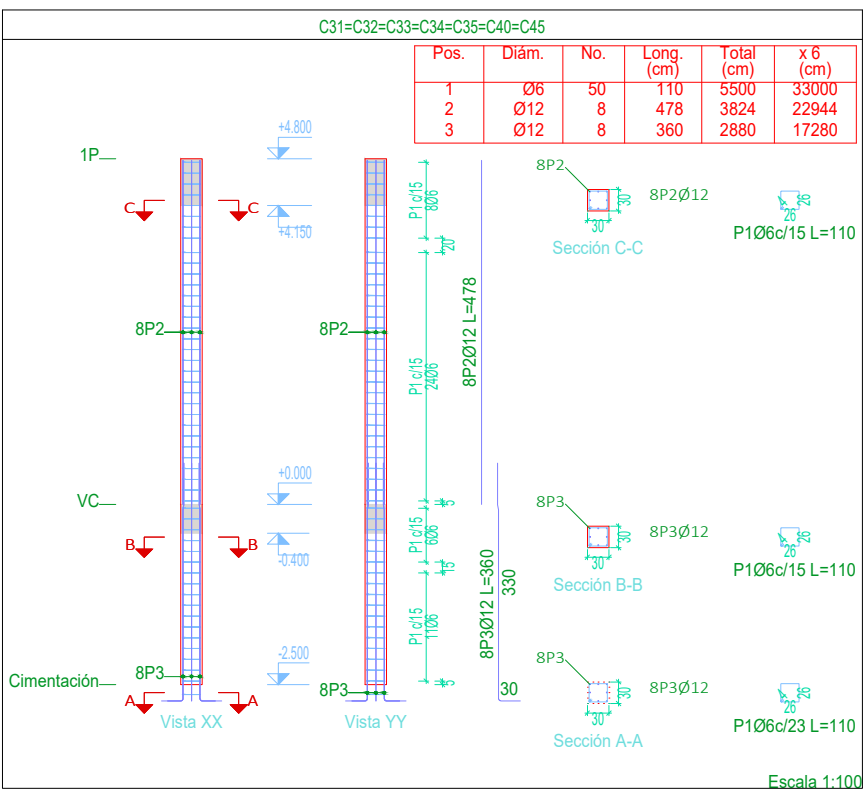
GRUPO 6 COLUMNAS



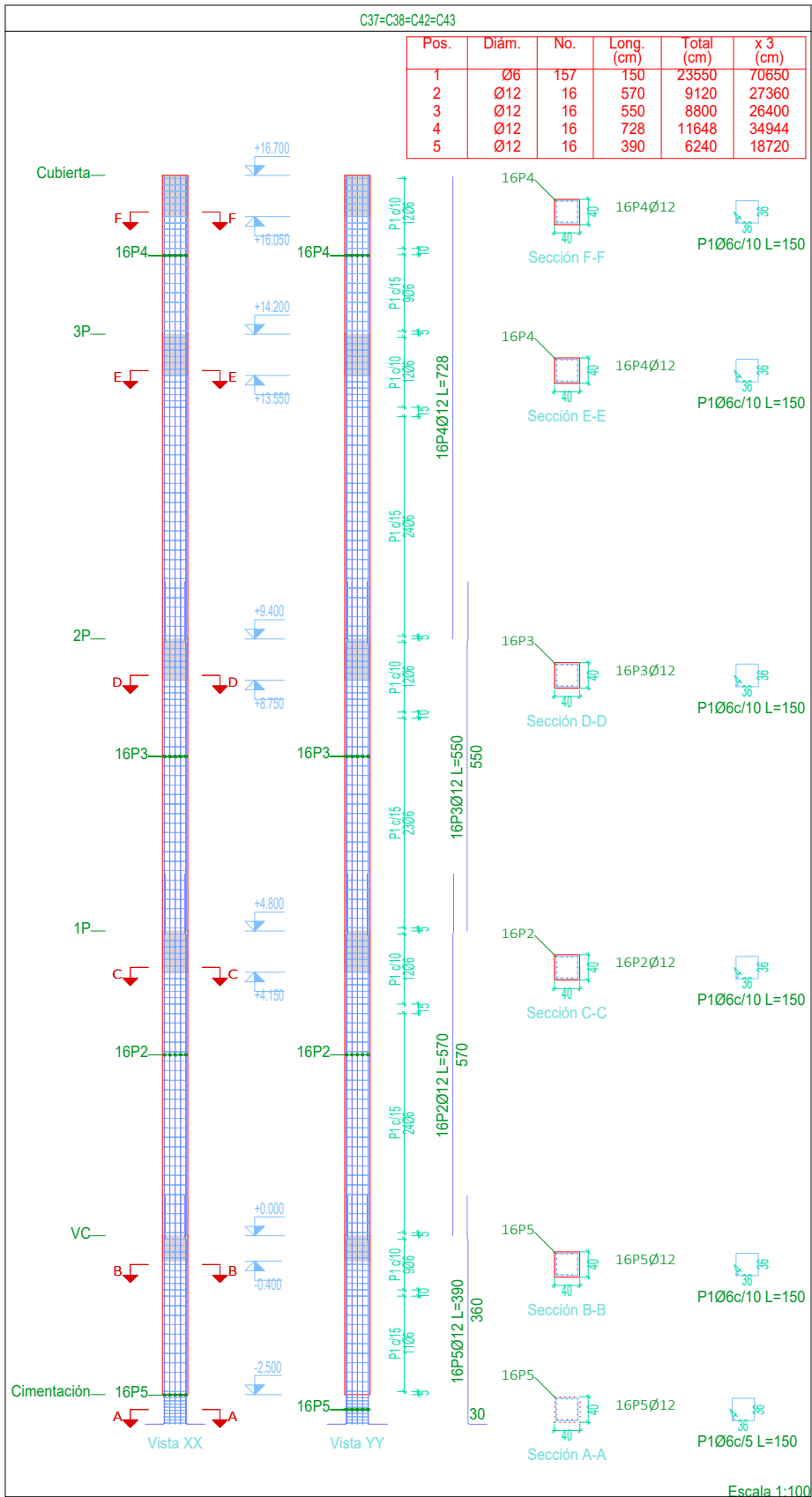
GRUPO 3 COLUMNAS



GRUPO 7 COLUMNAS



GRUPO 4 COLUMNAS

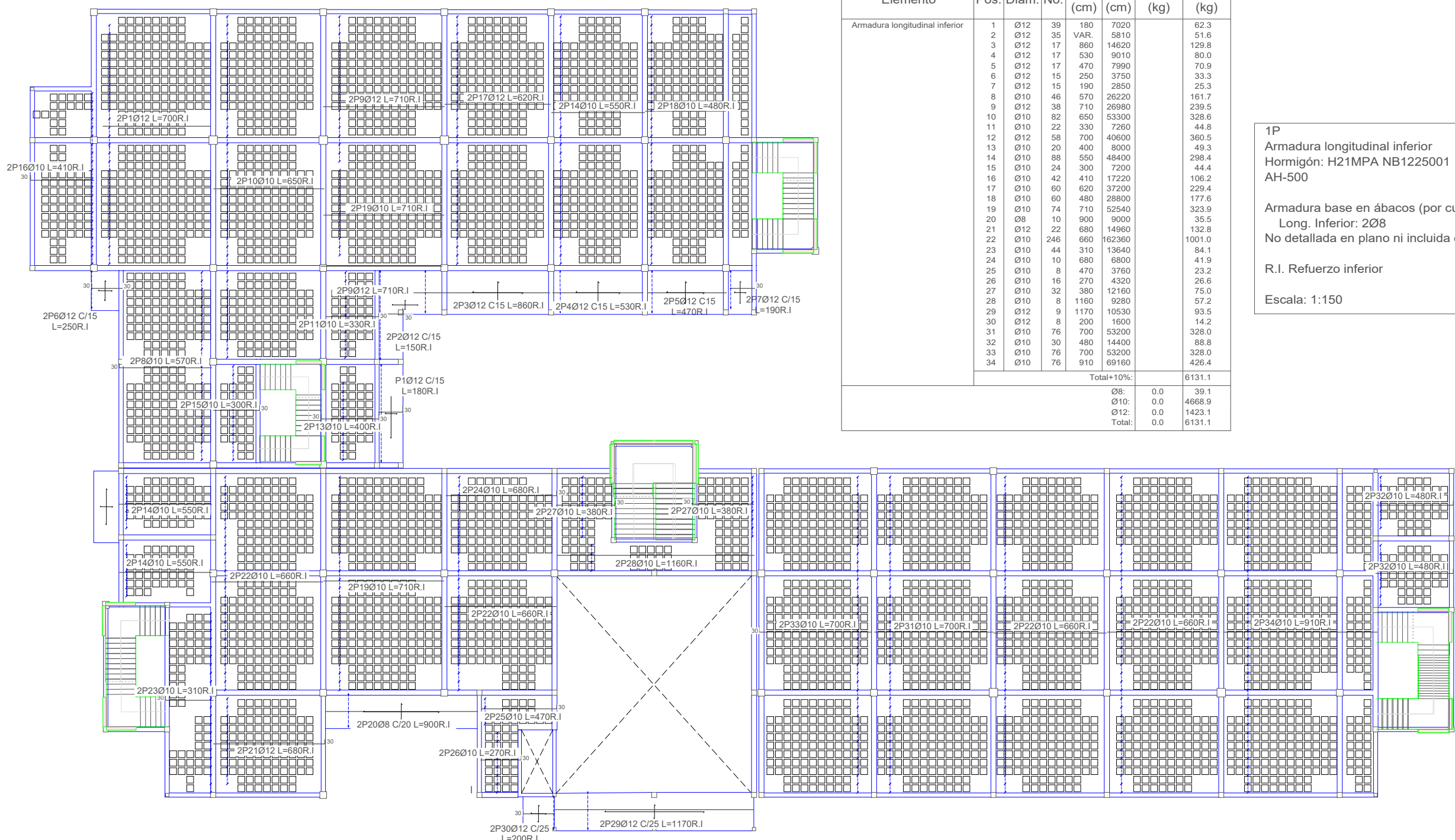


Pilares que nacen en VC y mueren en Cubierta
Hormigón: H21MPA NB1225001
Acero en barras: AH-500
Acero en estribos: AH-420

Resumen Acero Pilares	Long. total (m)	Peso+10% (kg)	Total
AH-420 Ø6	15979.6	3901	3901
AH-500 Ø12	22356.9	21834	21834
Ø16	1663.8	2889	24723
Total			28624

Elemento	Pos.	Diam.	No.	Esquema (cm)	Long (cm)	Total (cm)	AH-420 (kg)	AH-500 (kg)
GRUPO 1 COLUMNAS	1	Ø6	114		150	17100	37.9	
	2	Ø12	16		530	8480		75.3
	3	Ø12	16		520	8320		73.9
	4	Ø12	16		478	7648		67.9
	5	Ø12	16		370	5920		52.6
					Total+10% (Kg)		41.7	298.7
GRUPO 2 COLUMNAS	1	Ø6	71		190	13480	29.9	
	2	Ø16	16		570	9120		143.9
	3	Ø16	16		550	8800		138.9
	4	Ø16	16		478	7648		103.7
	5	Ø16	16		410	6560		103.5
					Total+10% (Kg)		30.9	557.7
GRUPO 3 COLUMNAS	1	Ø6	113		110	12430	27.6	
	2	Ø12	8		530	4240		37.6
	3	Ø12	8		510	4080		36.2
	4	Ø12	8		478	3824		34.0
	5	Ø12	8		360	2880		25.6
					Total+10% (Kg)		30.4	146.7
GRUPO 4 COLUMNAS	1	Ø6	157		150	23550	52.3	
	2	Ø12	16		570	9120		81.0
	3	Ø12	16		550	8800		78.1
	4	Ø12	16		728	11648		103.4
	5	Ø12	16		390	6240		55.4
					Total+10% (Kg)		57.5	348.9
GRUPO 5 COLUMNAS	1	Ø6	114		110	12540	27.8	
	2	Ø12	8		530	4240		37.6
	3	Ø12	8		510	4080		36.2
	4	Ø12	8		478	3824		34.0
	5	Ø12	8		360	2880		25.6
					Total+10% (Kg)		30.6	146.7
GRUPO 6 COLUMNAS	1	Ø6	116		70	8120	18.0	
	2	Ø12	4		530	2120		18.8
	3	Ø12	4		510	2040		18.1
	4	Ø12	4		478	1912		17.0
	5	Ø12	4		360	1440		12.8
					Total+10% (Kg)		18.8	73.5
GRUPO 7 COLUMNAS	1	Ø6	50		110	5500	12.2	
	2	Ø12	8		478	3824		34.0
	3	Ø12	8		360	2880		25.6
					Total+10% (Kg)		13.4	65.6

ARMADURA LONGITTUDINAL INFERIOR PRIMER PISO
ESC.:1:250

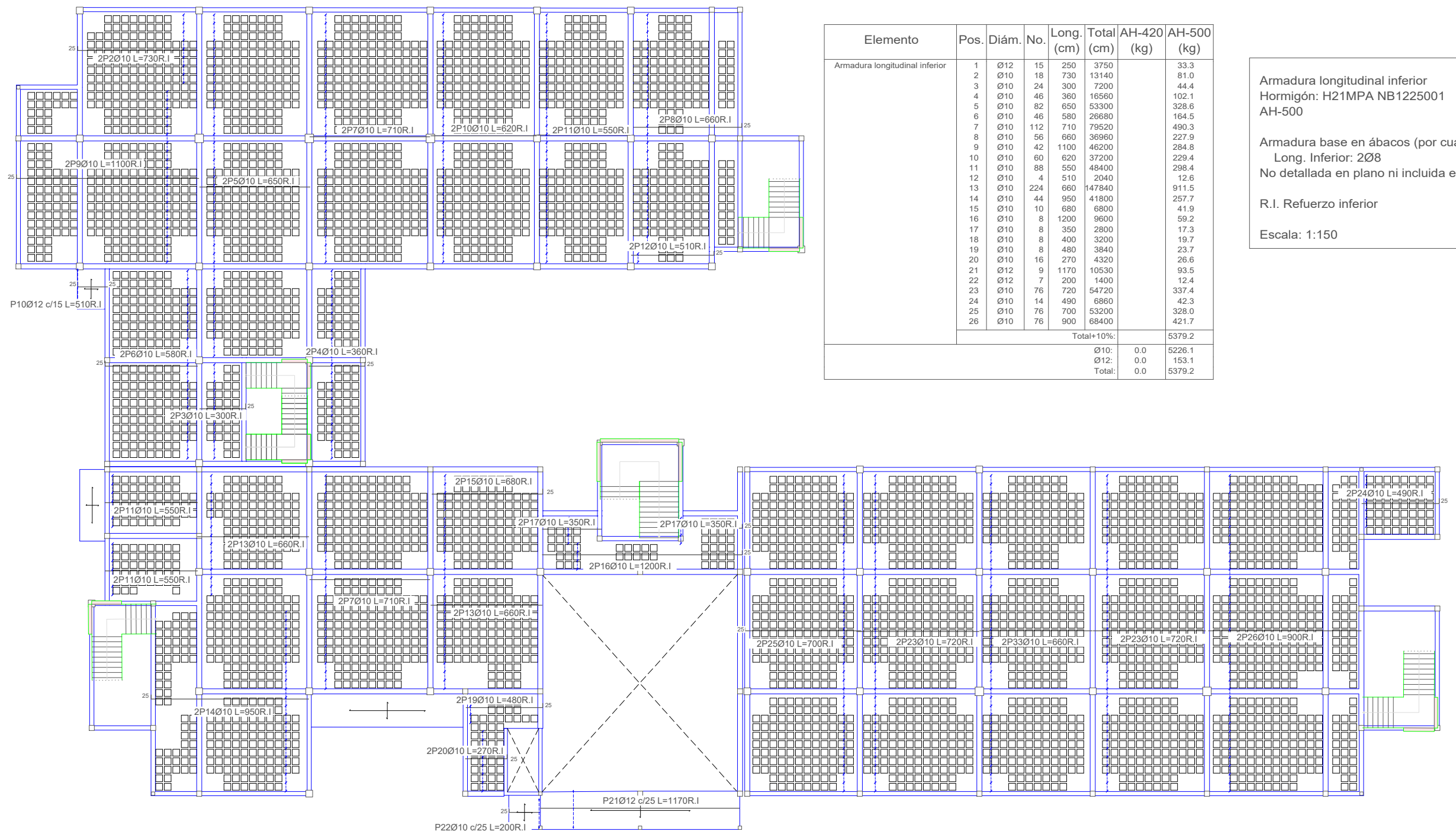


Elemento	Pos.	Diám.	No.	Long. (cm)	Total (kg)	AH-420 (kg)	AH-500 (kg)
Armadura longitudinal inferior	1	Ø12	39	186	7300	62.3	
	2	Ø12	35	VAR.	5810	51.8	
	3	Ø12	17	860	14620	129.8	
	4	Ø12	17	530	9010	80.0	
	5	Ø12	17	470	7980	70.9	
	6	Ø12	15	200	3750	33.3	
	7	Ø12	15	190	2850	25.3	
	8	Ø10	46	570	26220	161.7	
	9	Ø12	38	710	26880	239.5	
	10	Ø10	82	650	53200	328.6	
	11	Ø10	22	330	7260	44.8	
	12	Ø12	58	700	49800	390.2	
	13	Ø10	20	400	8000	49.3	
	14	Ø10	88	500	49400	298.4	
	15	Ø10	24	300	7200	44.4	
	16	Ø10	42	410	17220	106.2	
	17	Ø10	60	620	37200	228.4	
	18	Ø10	60	480	28800	177.6	
	19	Ø10	74	710	52540	333.9	
	20	Ø8	10	900	9000	35.5	
	21	Ø12	22	980	14860	132.8	
	22	Ø10	246	660	162360	1001.0	
	23	Ø10	44	310	13640	84.1	
	24	Ø10	10	680	6800	41.9	
	25	Ø10	8	470	3760	23.2	
	26	Ø10	16	370	4320	26.6	
	27	Ø10	32	380	12160	75.0	
	28	Ø10	8	1160	9080	97.2	
	29	Ø12	9	1170	10530	93.5	
	30	Ø12	8	700	1680	14.2	
	31	Ø10	76	700	53200	328.6	
	32	Ø10	20	480	14400	88.8	
	33	Ø10	76	700	53200	328.6	
	34	Ø10	76	910	69160	426.4	
Total+10%:					6131.1		
Ø8:					0.0	39.1	
Ø10:					0.0	4688.9	
Ø12:					0.0	1423.1	
Total:					0.0	6131.1	

1P
Armadura longitudinal inferior
Hormigón: H21MPA NB1225001
AH-500
Armadura base en ábacos (por cuadrícula)
Long. Inferior: 2Ø8
No detallada en plano ni incluida en la medición
R.I. Refuerzo inferior
Escala: 1:150

Resumen Acero	Long. total (m)	Peso+10% (kg)	Total
Armadura longitudinal inferior			
AH-500	Ø8 90.0 Ø10 6884.2 Ø12 1457.2	39 4669 1423	6131

ARMADURA LONGITTUDINAL INFERIOR SEGUNDO PISO
ESC.:1:250

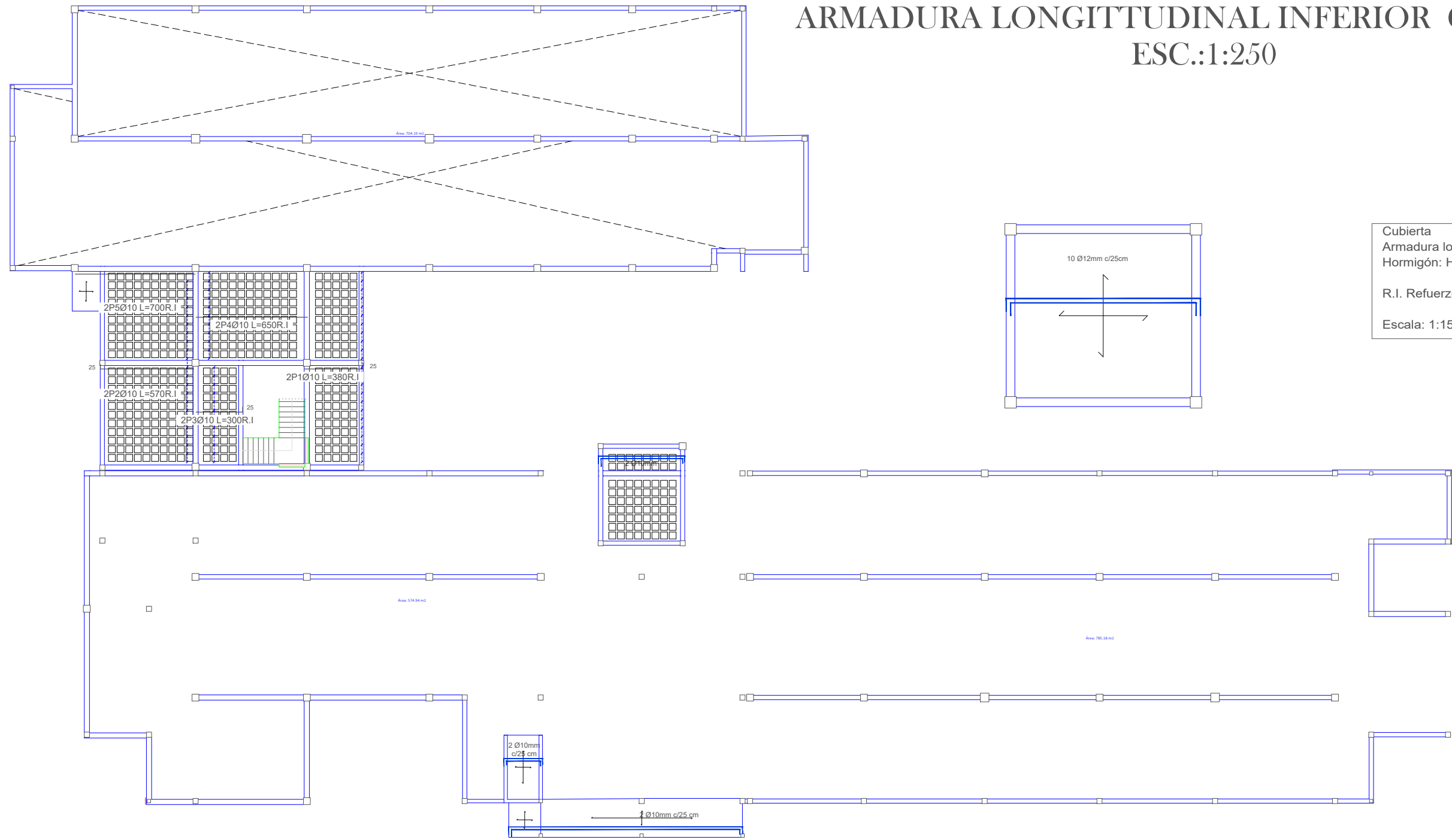


Elemento	Pos.	Diám.	No.	Long. (cm)	Total (kg)	AH-420 (kg)	AH-500 (kg)
Armadura longitudinal inferior	1	Ø12	15	250	3750	33.3	
	2	Ø10	18	730	13140	81.0	
	3	Ø10	24	300	7200	44.4	
	4	Ø10	46	300	16650	102.1	
	5	Ø10	62	650	53300	328.6	
	6	Ø10	46	300	26650	164.5	
	7	Ø10	112	710	79520	490.3	
	8	Ø10	56	350	26650	164.5	
	9	Ø10	42	1100	46200	284.8	
	10	Ø10	60	620	37200	228.4	
	11	Ø10	88	500	49400	298.4	
	12	Ø10	4	510	2040	12.6	
	13	Ø10	224	600	141600	181.5	
	14	Ø10	44	950	41800	257.7	
	15	Ø10	10	600	6000	37.5	
	16	Ø10	8	1200	9600	59.2	
	17	Ø10	8	350	2800	17.3	
	18	Ø10	8	400	3200	19.7	
	19	Ø10	8	400	3200	23.7	
	20	Ø10	16	270	4320	26.6	
	21	Ø12	9	1170	10530	93.5	
	22	Ø12	7	200	1400	12.4	
	23	Ø10	76	720	54720	337.4	
	24	Ø10	14	460	6440	42.3	
	25	Ø10	76	700	53200	328.6	
	26	Ø10	76	900	69000	421.7	
Total+10%:					5379.2		
Ø10:					0.0	5226.1	
Ø12:					0.0	153.1	
Total:					0.0	5379.2	

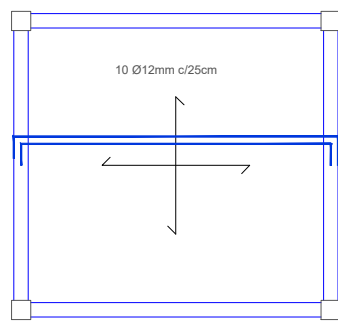
2P
Armadura longitudinal inferior
Hormigón: H21MPA NB1225001
AH-500
Armadura base en ábacos (por cuadrícula)
Long. Inferior: 2Ø8
No detallada en plano ni incluida en la medición
R.I. Refuerzo inferior
Escala: 1:150

Resumen Acero	Long. total (m)	Peso+10% (kg)	Total
Armadura longitudinal inferior			
AH-500	Ø10 7705.8 Ø12 156.8	5226 153	5379

ARMADURA LONGITTUDINAL INFERIOR TERCER PISO
ESC.:1:250



ARMADURA LONGITTUDINAL INFERIOR CUBIERTA
ESC.:1:250



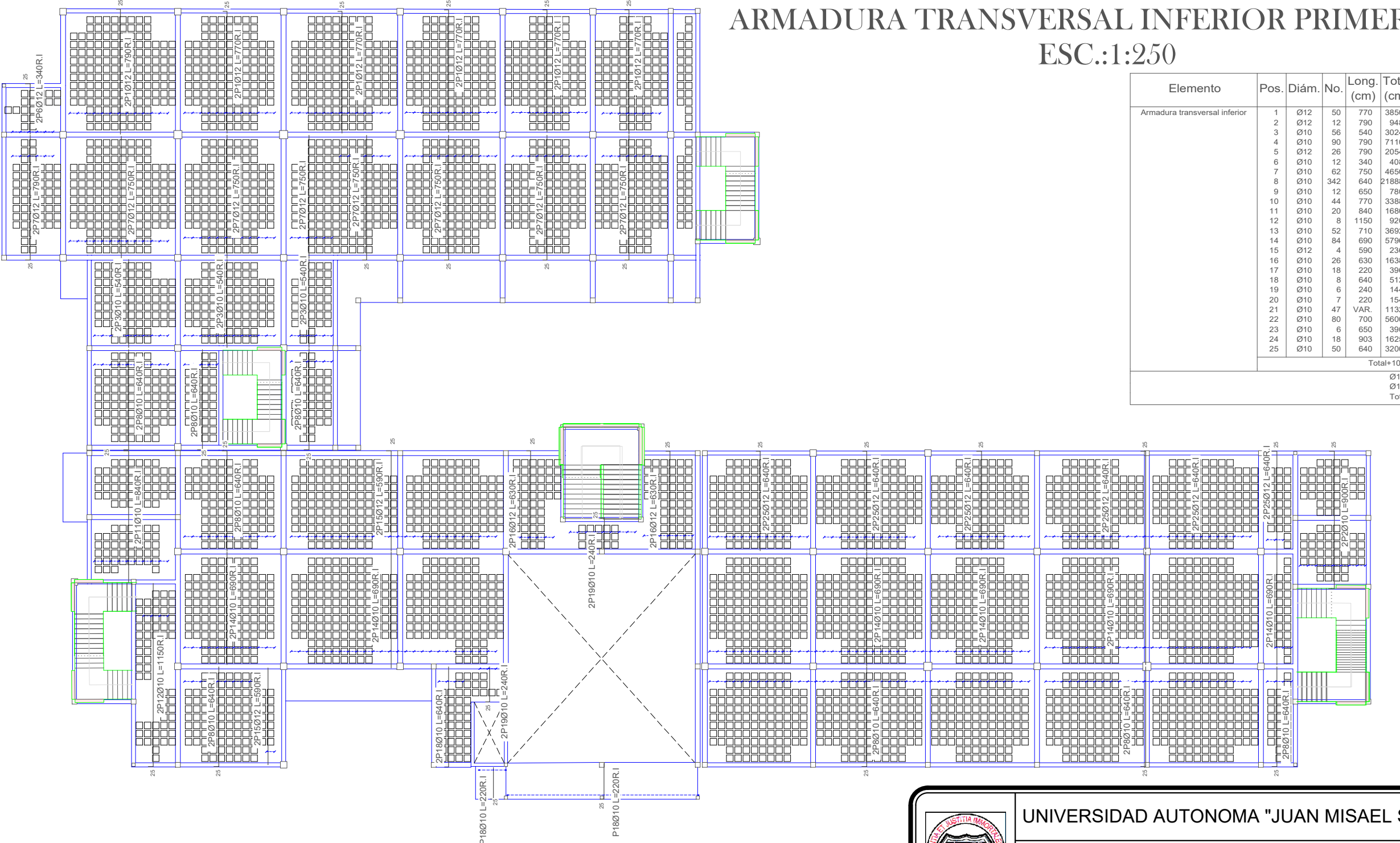
Cubierta
Armadura longitudinal inferior
Hormigón: H21MPA NB1225001
R.I. Refuerzo inferior
Escala: 1:150

Elemento	Pos.	Diám.	No.	Long. (cm)	Total (kg)	AH-420 (kg)	AH-500 (kg)
Armadura longitudinal inferior	1	Ø10	46	380	17480	107.8	
	2	Ø10	44	570	22680	154.6	
	3	Ø10	24	300	7200	44.4	
	4	Ø10	22	650	14300	88.2	
	5	Ø10	2	700	1400	8.8	
Total+10%:					444.0		
Ø10:					0.0	444.0	
Total:					0.0	444.0	

Resumen Acero	Long. total (m)	Peso+10% (kg)
Armadura longitudinal inferior		
AH-500	Ø10 654.6	444

3P
Armadura longitudinal inferior
Hormigón: H21MPA NB1225001
AH-500
R.I. Refuerzo inferior
Escala: 1:150

ARMADURA TRANSVERSAL INFERIOR PRIMER PISO
ESC.:1:250



Elemento	Pos.	Diám.	No.	Long. (cm)	Total (kg)	AH-420 (kg)	AH-500 (kg)
Armadura transversal inferior	1	Ø12	50	770	38000	341.8	
	2	Ø12	12	790	9480	84.2	
	3	Ø10	58	540	30240	186.4	
	4	Ø10	90	790	71100	438.4	
	5	Ø12	28	790	22040	182.4	
	6	Ø10	12	340	4080	25.2	
	7	Ø10	62	750	46500	286.7	
	8	Ø10	342	640	218880	1349.5	
	9	Ø10	12	650	7800	48.1	
	10	Ø10	44	770	33880	208.9	
	11	Ø10	20	940	18800	109.6	
	12	Ø10	8	1150	9200	56.7	
	13	Ø10	52	710	36920	227.6	
	14	Ø10	84	690	57960	357.3	
	15	Ø12	4	590	2360	21.0	
	16	Ø10	26	630	16380	101.0	
	17	Ø10	18	220	3960	24.4	
	18	Ø10	8	640	5120	31.6	
	19	Ø10	6	240	1440	8.9	
	20	Ø10	7	220	1540	9.5	
	21	Ø10	47	VAR.	11327	69.8	
	22	Ø10	80	700	56000	345.3	
	23	Ø10	6	650	3900	24.0	
	24	Ø10	18	903	16254	100.2	
	25	Ø10	50	640	32000	197.5	
Total+10%:					5312.8		
Ø10:					0.0	4620.5	
Ø12:					0.0	692.3	
Total:					0.0	5312.8	

Resumen Acero	Long. total (m)	Peso+10% (kg)	Total
Armadura transversal inferior			
AH-500	Ø10 6812.8 Ø12 708.8	4620 692	5312

1P
Armadura transversal inferior
Hormigón: H21MPA NB1225001
AH-500
Armadura base en ábacos (por cuadrícula)
Trans. Inferior: 2Ø8
No detallada en plano ni incluida en la medición
Escala: 1:150



UNIVERSIDAD AUTONOMA "JUAN MISAEL SARACHO"
DISEÑO ESTRUCTURAL EPI LOMA DE TOMATITAS PROV.MENDEZ

CARACTER: **ARMADURA DE LOSA RETICULAR 1ER PISO**

LAMINA

UNIVERSITARIO:
ORDÓÑEZ GALLARDO FERNANDO KEVIN

MATERIA:
PROYECTO DE GRADO II CIV-502

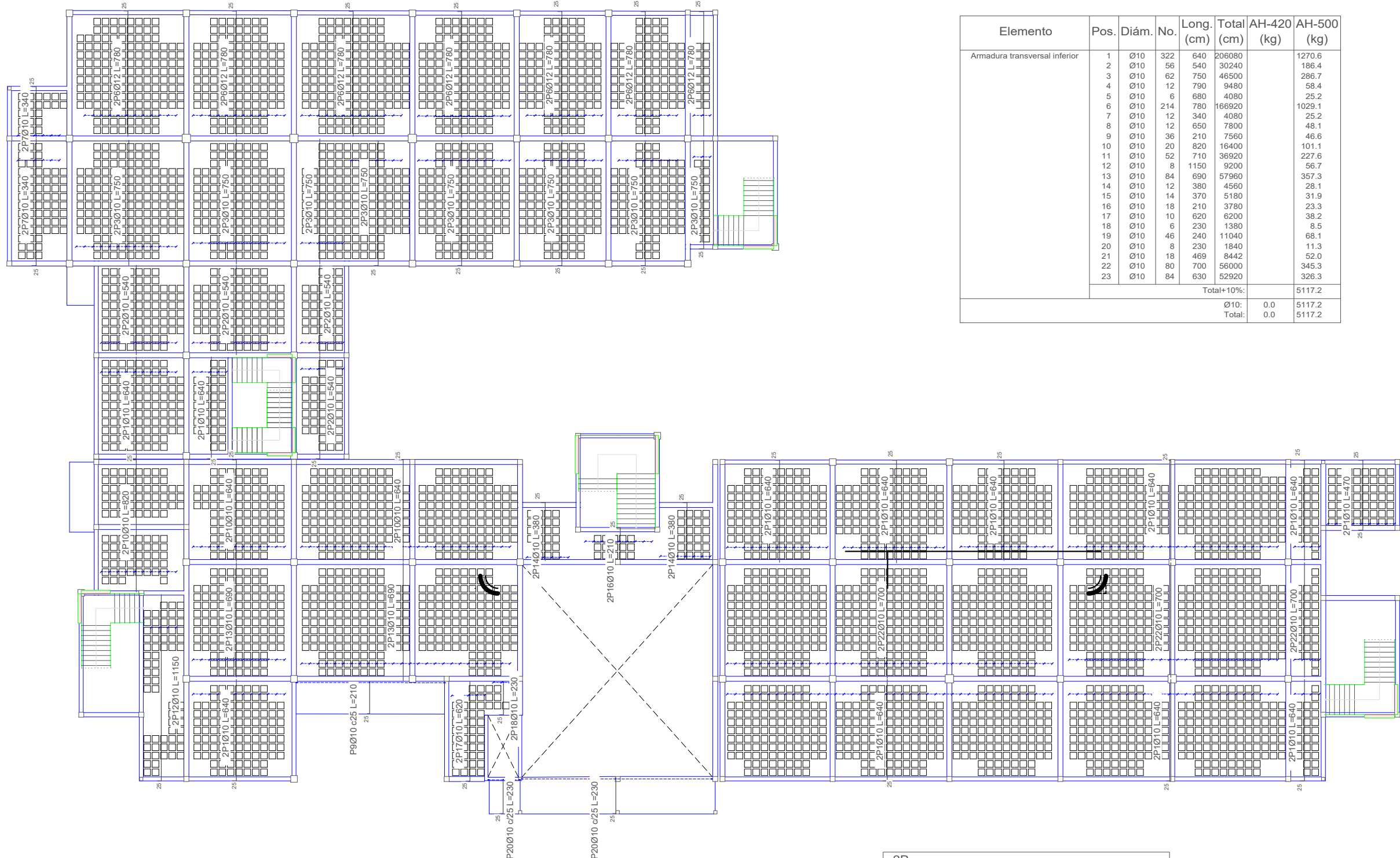
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ESCALA: **INDICADA**

FECHA: **T.JA. 19/09/2024**

DOCENTE: **ING. CARRASCO ARNOLD PAUL DENNIS**

ARMADURA TRANSVERSAL INFERIOR SEGUNDO PISO
ESC.:1:250

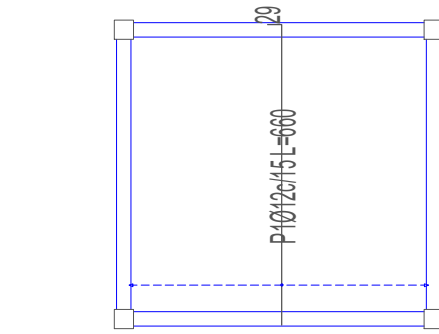
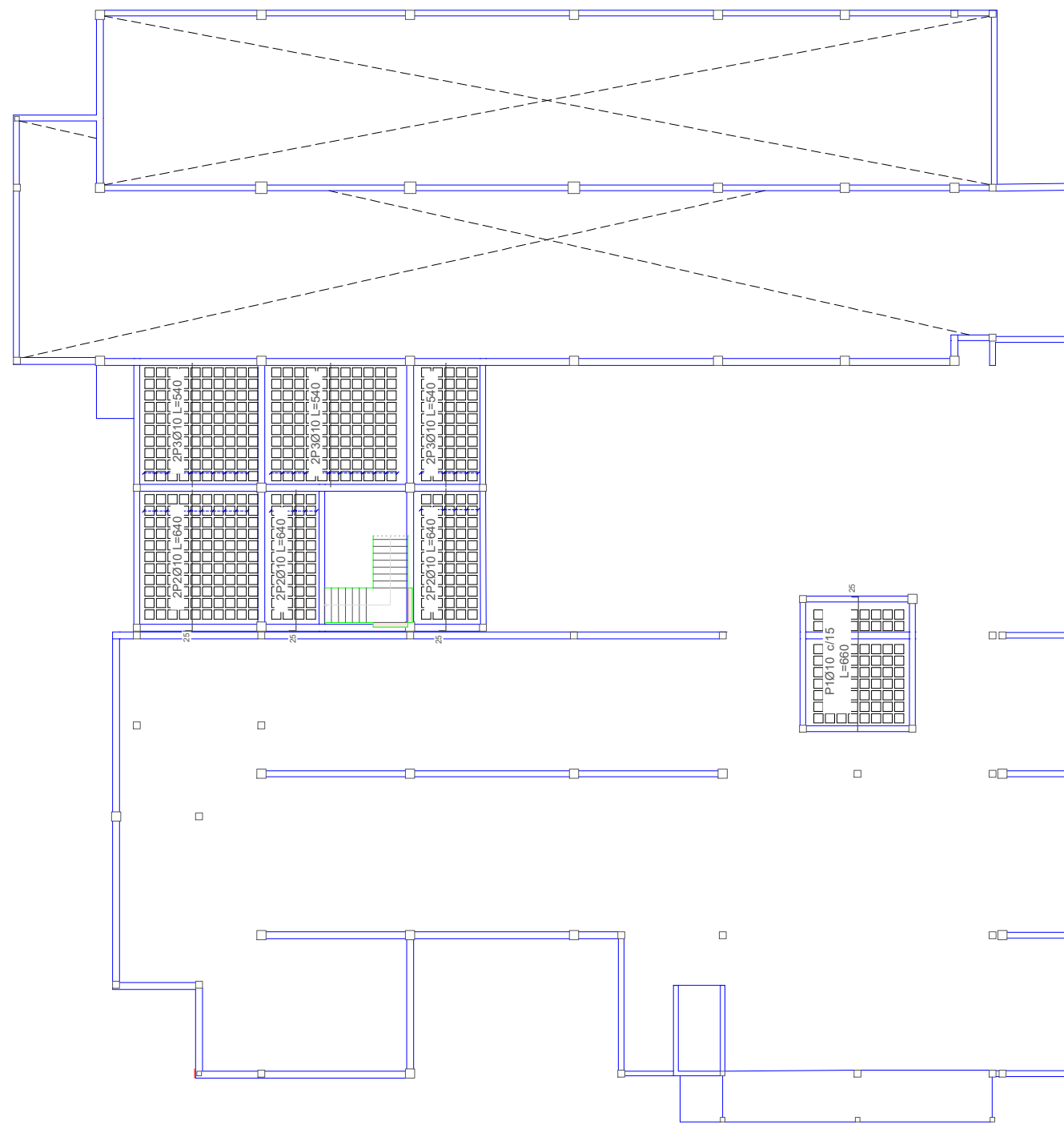


Elemento	Pos.	Diám.	No.	Long. (cm)	Total (cm)	AH-420 (kg)	AH-500 (kg)
Armadura transversal inferior							
1	Ø10	322	640	20080	1270.6		
2	Ø10	56	540	30240	186.4		
3	Ø10	62	750	46500	286.7		
4	Ø10	12	780	9480	58.4		
5	Ø10	6	680	4080	25.2		
6	Ø10	214	780	166920	1029.1		
7	Ø10	12	340	4080	25.2		
8	Ø10	12	650	7800	48.1		
9	Ø10	36	210	7560	46.6		
10	Ø10	20	820	16400	101.1		
11	Ø10	52	710	39920	227.8		
12	Ø10	8	1150	9200	56.7		
13	Ø10	84	690	57960	357.3		
14	Ø10	12	380	4560	28.1		
15	Ø10	14	370	5180	31.9		
16	Ø10	18	210	3780	23.3		
17	Ø10	10	620	6200	38.2		
18	Ø10	6	230	1380	8.5		
19	Ø10	46	240	11040	68.1		
20	Ø10	8	230	1840	11.3		
21	Ø10	16	460	8440	52.0		
22	Ø10	86	700	59800	345.3		
23	Ø10	84	630	52020	326.3		
Total+10%				5117.2			
Ø10:				0.0	5117.2		
Total:				0.0	5117.2		

Resumen Acero 2P Armadura transversal inferior	Long. total (m)	Peso+10% (kg)
AH-500 Ø10	7545.6	5117

2P
Armadura transversal inferior
Hormigón: H21MPA NB1225001
AH-500
Armadura base en ábacos (por cuadrícula)
Trans. Inferior: 208
No detallada en plano ni incluida en la medición
Escala: 1:150

ARMADURA TRANSVERSAL INFERIOR TERCER PISO
ESC.:1:250



ARMADURA LONGITTUDINAL INFERIOR CUBIERTA
ESC.:1:150

Resumen Acero Cubierta	Long. total (m)	Peso+10% (kg)
Armadura transversal inferior		
AH-500 Ø12	277.2	271

Elemento	Pos.	Diám.	No.	Long. (cm)	Total (cm)	AH-420 (kg)	AH-500 (kg)
Armadura transversal inferior							
1	Ø12	42	660	27720	246.1		
Total+10%				270.7			
Ø12:				0.0	270.7		
Total:				0.0	270.7		

Cubierta
Armadura transversal inferior
Hormigón: H21MPA NB1225001
AH-500
Escala: 1:150

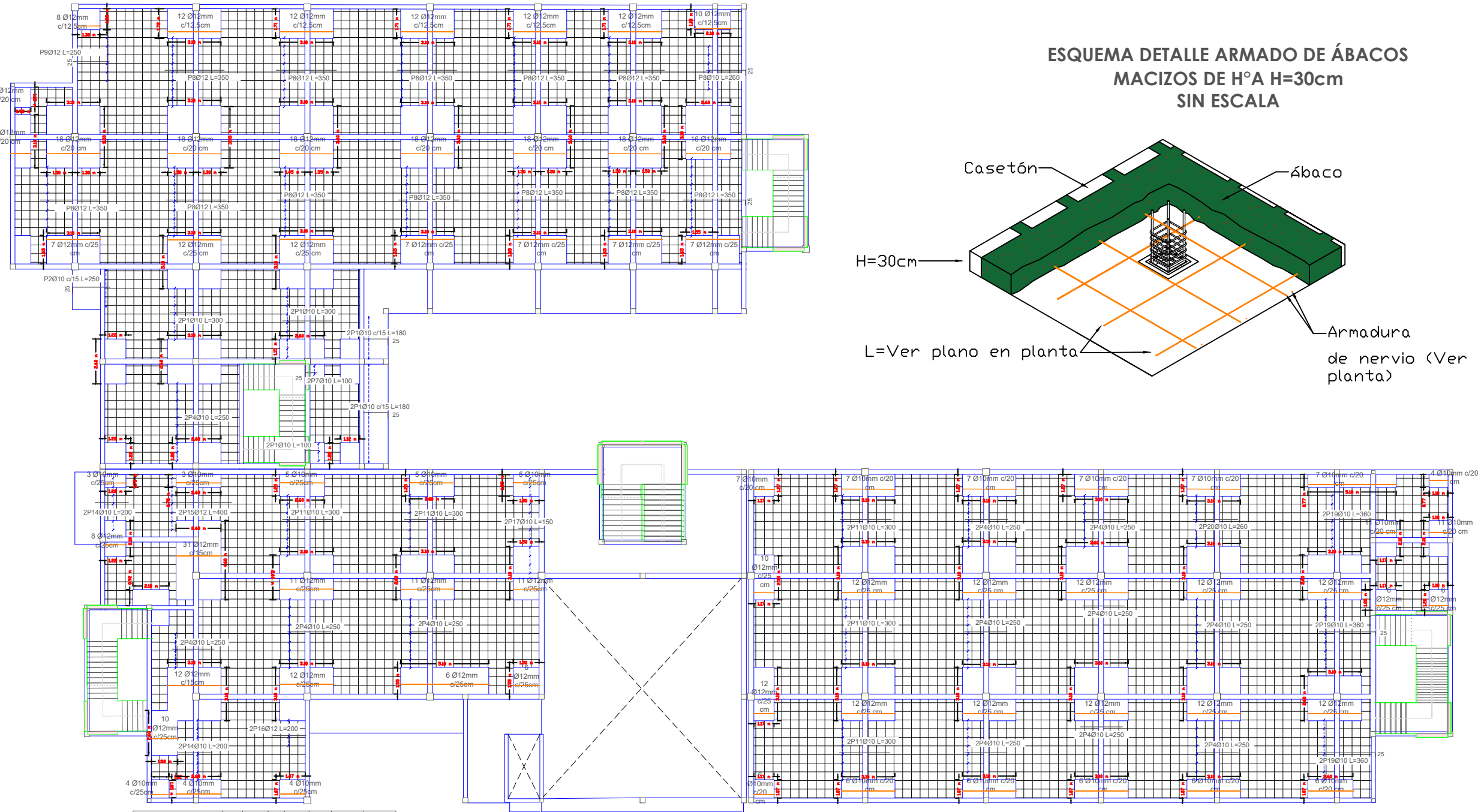
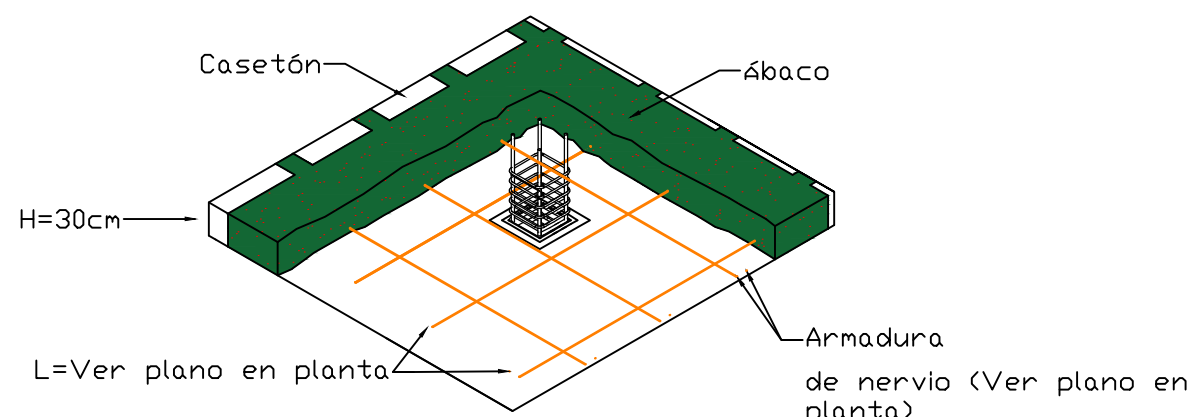
Elemento	Pos.	Diám.	No.	Long. (cm)	Total (cm)	AH-420 (kg)	AH-500 (kg)
Armadura transversal inferior							
1	Ø10	12	650	7800	48.1		
2	Ø10	30	640	19200	116.4		
3	Ø10	56	540	30240	186.4		
Total+10%				388.2			
Ø10:				0.0	388.2		
Total:				0.0	388.2		

Resumen Acero 3P	Long. total (m)	Peso+10% (kg)
Armadura transversal inferior		
AH-500 Ø10	572.4	388

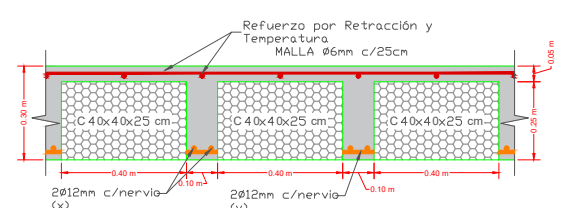
3P
Armadura transversal inferior
Hormigón: H21MPA NB1225001
AH-500
Escala: 1:150

ARMADURA LONGITTUDINAL SUPERIOR Y ARMADURA DE ÁBACOS PRIMER PISO ESC.:1:150

ESQUEMA DETALLE ARMADO DE ÁBACOS
MACIZOS DE Hª H=30cm
SIN ESCALA

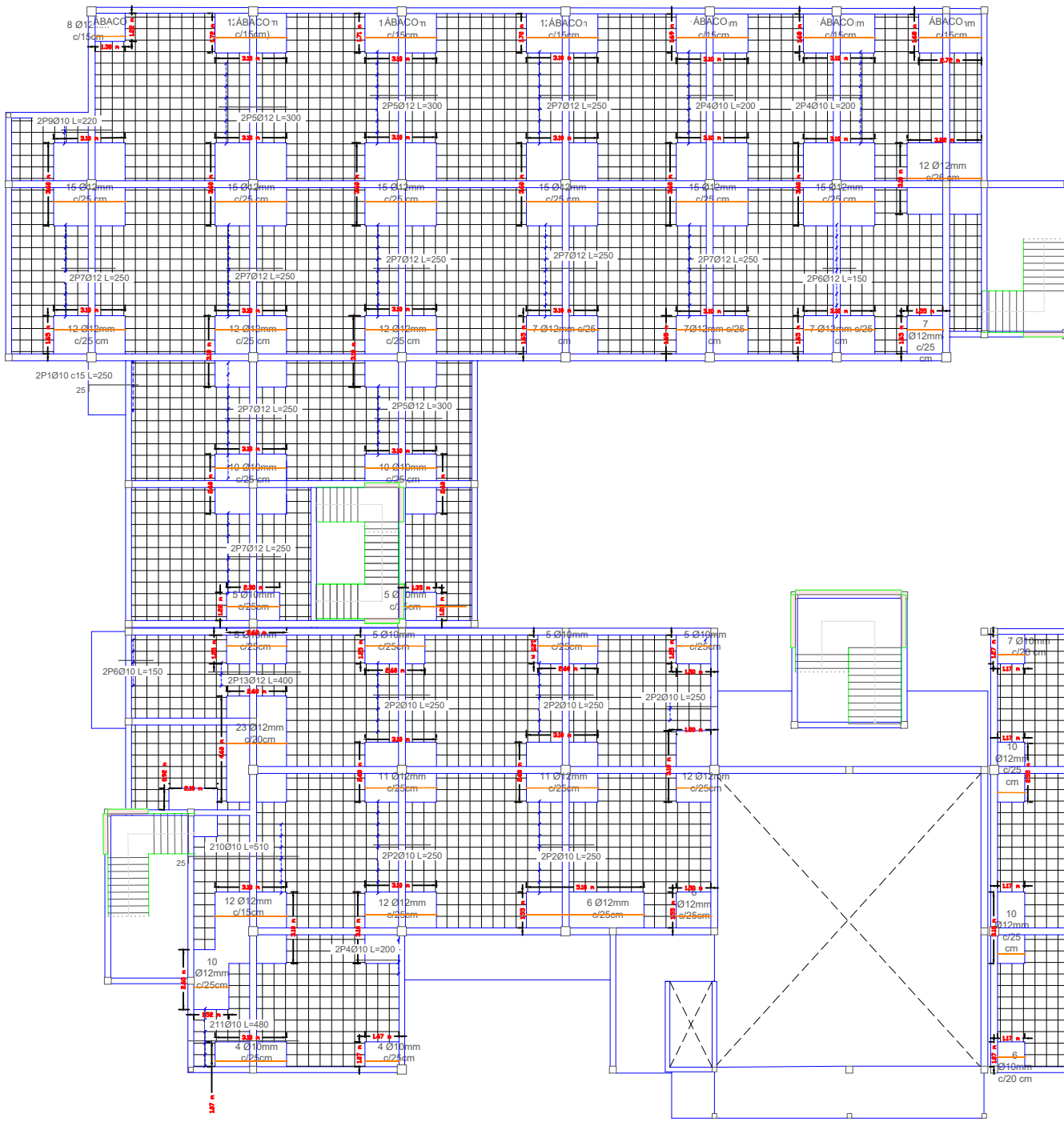


DETALLE LOSA RETICULAR (LR 30cm)
ESCALA 1:10



Resumen Acero 1P		Long. total (m)	Peso+10% (kg)	Total
Armadura longitudinal superior				
AH-500	Ø10	1727.9	1172	
	Ø12	409.0	399	1571

ARMADURA LONGITTUDINAL SUPERIOR Y ARMADURA DE ÁBACOS LONGITUDINAL SEGUNDO PISO ESC.:1:150



Elemento	Pos.	Diám.	No.	Long. (cm)	Total (cm)	AH-420 (kg)	AH-500 (kg)
Armadura longitudinal superior							
1	Ø10	72	200	14400	23.1		
2	Ø10	200	1000	144000	198.1		
3	Ø10	60	200	14400	19.8		
4	Ø10	60	200	14400	19.8		
5	Ø10	60	200	14400	19.8		
6	Ø10	60	200	14400	19.8		
7	Ø10	60	200	14400	19.8		
8	Ø10	60	200	14400	19.8		
9	Ø10	60	200	14400	19.8		
10	Ø10	60	200	14400	19.8		
11	Ø10	60	200	14400	19.8		
12	Ø10	60	200	14400	19.8		
13	Ø10	60	200	14400	19.8		
14	Ø10	60	200	14400	19.8		
15	Ø10	60	200	14400	19.8		
16	Ø10	60	200	14400	19.8		
17	Ø10	60	200	14400	19.8		
Total+10%				1028.9			
Ø10:				0.0	1028.9		
Total:				0.0	1028.9		

2P
Armadura longitudinal superior
Hormigón: H21MPA NB1225001
AH-500
Armadura base en ábacos (por cuadrícula)
Long. Superior: 2010
No detallada en plano ni incluida en la medición
Escala: 1:100

Resumen Acero 2P Armadura longitudinal superior		Long. total (m)	Peso+10% (kg)	Total
AH-500	Ø10	1512.7	1026	
	Ø12	181.0	177	1203

UNIVERSIDAD AUTONOMA "JUAN MISAEL SARACHO"
DISEÑO ESTRUCTURAL EPI LOMA DE TOMATITAS PROV.MENDEZ

CARACTER:
ARMADURA LOSA RETICULAR 1ER, 2DO PISO

LAMINA

UNIVERSITARIO:
ORDÓÑEZ GALLARDO FERNANDO KEVIN

MATERIA:
PROYECTO DE GRADO II CIV-502

ESCALA:
INDICADA

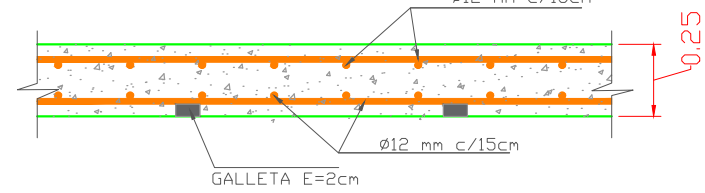
FECHA:
T.J.A. 19/09/2024

DOCENTE:
ING. CARRASCO ARNOLD PAUL DENNIS

18/21

3P
 Armadura longitudinal superior
 Hormigón: H21MPa NB1225001
 Añ:200
 Escala: 1:100

DETALLE LOSA MACIZA H=25 CM
ESCALA 1:10



0.25 m

Diagrama de la sección transversal de un elemento de concreto reforzado. Muestra tres columnas de concreto con refuerzo de acero. Las dimensiones horizontales son: 0.40m entre columnas, 0.40m entre columnas, y 0.40m entre columnas. Las dimensiones verticales son: 0.80m de altura total, 0.20m de altura de la losa superior, y 0.20m de altura de la losa inferior. El refuerzo incluye barras de acero C40x40x25 cm y una malla de 6mm c/25cm. Se indica la "Refuerza por Retención y Temperatura" y la "Malla 6mm c/25cm". Las columnas están etiquetadas como "2012mm c/nervio (x)" y "2012mm c/nervio (y)".

Resumen Acero 3P	Long. total (m)	Peso+10%
Armadura longitudinal superior		
AH-500 Ø10	534.7	363

[illegible]This is a detailed architectural floor plan of a building's ground floor. The plan shows a complex arrangement of rooms, corridors, and service areas. Key features include:

- Room Layout:** Numerous rooms are outlined with blue walls. Some rooms have specific labels like "29601 L-100", "29607 L-100", and "29608 L-100". There are also larger open spaces labeled "29601 L-100" and "29607 L-100".
- Dimensions:** Various dimensions are provided throughout the plan, such as "10.00mm", "11.00mm", "12.00mm", "13.00mm", "14.00mm", "15.00mm", "16.00mm", "17.00mm", "18.00mm", "19.00mm", "20.00mm", "21.00mm", "22.00mm", "23.00mm", "24.00mm", "25.00mm", "26.00mm", "27.00mm", "28.00mm", "29.00mm", "30.00mm", "31.00mm", "32.00mm", "33.00mm", "34.00mm", "35.00mm", "36.00mm", "37.00mm", "38.00mm", "39.00mm", "40.00mm", "41.00mm", "42.00mm", "43.00mm", "44.00mm", "45.00mm", "46.00mm", "47.00mm", "48.00mm", "49.00mm", "50.00mm", "51.00mm", "52.00mm", "53.00mm", "54.00mm", "55.00mm", "56.00mm", "57.00mm", "58.00mm", "59.00mm", "60.00mm", "61.00mm", "62.00mm", "63.00mm", "64.00mm", "65.00mm", "66.00mm", "67.00mm", "68.00mm", "69.00mm", "70.00mm", "71.00mm", "72.00mm", "73.00mm", "74.00mm", "75.00mm", "76.00mm", "77.00mm", "78.00mm", "79.00mm", "80.00mm", "81.00mm", "82.00mm", "83.00mm", "84.00mm", "85.00mm", "86.00mm", "87.00mm", "88.00mm", "89.00mm", "90.00mm", "91.00mm", "92.00mm", "93.00mm", "94.00mm", "95.00mm", "96.00mm", "97.00mm", "98.00mm", "99.00mm", "100.00mm".
- Structural Elements:** The plan includes a grid system with vertical and horizontal lines. Structural columns are indicated by small circles. Stairs are shown with green outlines and arrows indicating direction.
- Service Areas:** There are several service areas, including restrooms, storage rooms, and utility rooms, each with its own set of dimensions and labels.
- Entrances and Exits:** The plan shows multiple entrances and exits, some marked with red dots and others with green outlines.

The overall design is precise and technical, typical of professional architectural drawings.

1P
Armadura transversal superior
Hormigón: H21MPA NB1225001
AH-500

Armadura base en ábacos (por cuadrícula)
Trans. Superior: 2Ø10
No detallada en plano ni incluida en la medición
Escala: 1:100

Resumen Acero 1P	Long. total (m)	Peso+10% (kg)	Total
Armadura transversal superior			
AH-500 Ø10	957.8	650	
Ø12	329.6	322	972

Elemento	Pos.	Díam. No.	Long. (cm)	Total (cm)	AH-420 (kg)	AH-500 (kg)
<i>América transversal superior</i>						
1	010	0	200	1200	14.0	
2	010	0	200	1200	7.4	
3	010	138	200	1400	212.7	
4	012	80	400	1400	284.1	
5	010	38	100	3800	23.4	
6	010	66	100	6600	40.7	
7	014	14	250	2500	17.3	
8	012	8	300	3000	56.0	
9	010	28	300	5400	54.0	
10	010	8	270	2700	16.4	
11	010	8	280	2240	13.8	
12	010	134	240	32160	56.3	
Totales (kg)					971.6	
					010: 0.0	545.7
					012: 0.0	371.6
					040: 0.0	971.6

Elemento	Pos.	Diam.	No.	Long. (cm)	Total (cm)	AH-420 (cm)	AH-500 (cm)
Arbitraria transversal superior							
1	010	8	200	2700	2700	211	16.6
2	010	18	10	10	2710		16.6
3	010	222	250	2500	2750		342.2
4	010	84	300	300	2780		103.8
5	010	8	90	90	2870		13.3
6	010	12	130	130	2900		5.0
7	010	18	300	600	2900		38.8
8	010	8	280	1480	2960		16.4
9	010	10	140	140	3000		6.6
10	010	26	150	350	3050		24.0
11	010	8	200	200	3100		7.4
12	010	8	330	2640			18.3
Total							
	010:				0.0	682.3	
	012:				0.0	242.9	
	014:				0.0	683.1	

Resumen Acero 2P	Long. total (m)	Peso+10% (kg)	Total
Armadura transversal superior			
AH-500	Ø10	958.4	650
	Ø12	238.0	232
			882

2P
Armadura transversal superior
Hormigón: H21MPA NB1225001
AH-500

Armadura base en dábacos (por cuadrícula)
Trans. Superior: 2Ø10
No detallada en plano ni incluida en la medición
Escala: 1:100

[illegible][illegible]

Resumen Acero 3P	Long. total (m)	Peso+10% (kg)
Armadura transversal superior		
AH-500 Ø10	548.6	372

3P
Armadura transversal superior
Hormigón: H21MPA NB1225001
AH-500
Escala: 1:100

Resumen Acero Cubierta Armadura transversal superior	Long. total (m)	Peso+10% (kg)
AH-500 Ø8	176.4	77

Elemento	Pos.	Diám.	No.	Long. (cm)	Total (cm)	AH-420 (kg)	AH-500 (kg)
Atriladora transversal superior	1	Ø8	42	190	7680		21.5
	2	Ø8	42	230	9460		28.1
Total: 10%:							78.6
OE:						0.0	78.6
Total:							

Cubierta
Armadura transversal superior
Hormigón: H21MPA NB1225001
AH-600
Escala: 1:100



UNIVERSIDAD AUTONOMA "JUAN MISAEL SARACHO"
DISEÑO ESTRUCTURAL EPI LOMA DE TOMATITAS PROV.MENDEZ

CARACTER:	ARMADURA LOSA RETICULAR 3CER PISO
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UNIVERSITARIO:

ORDÓÑEZ GALLARDO FERNANDO KEVIN

MATERIA:

PROYECTO DE GRADO II CIV-502

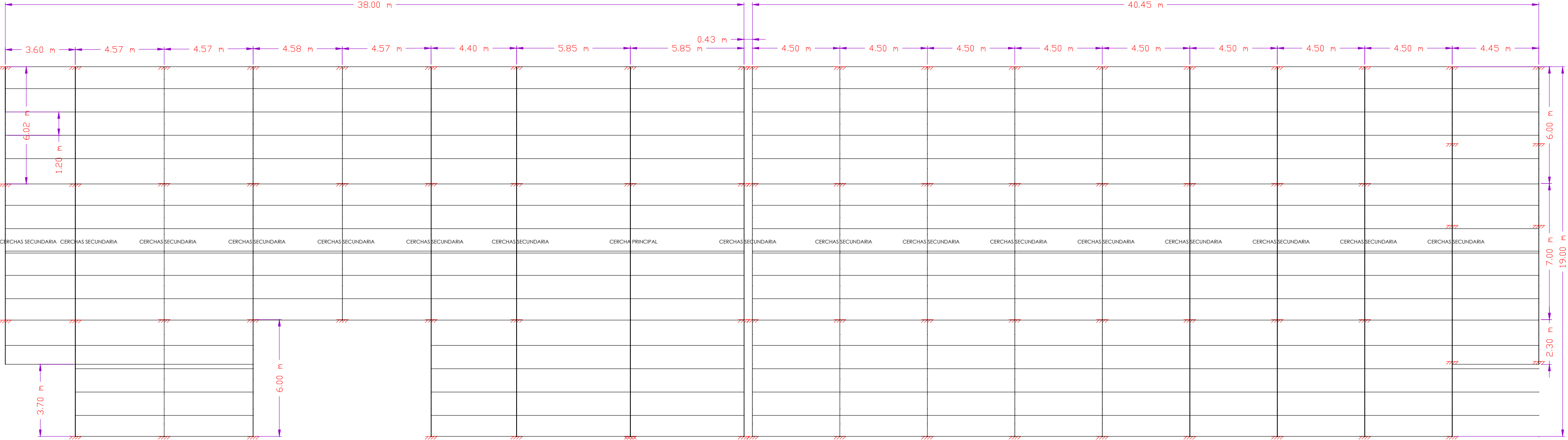
19/21

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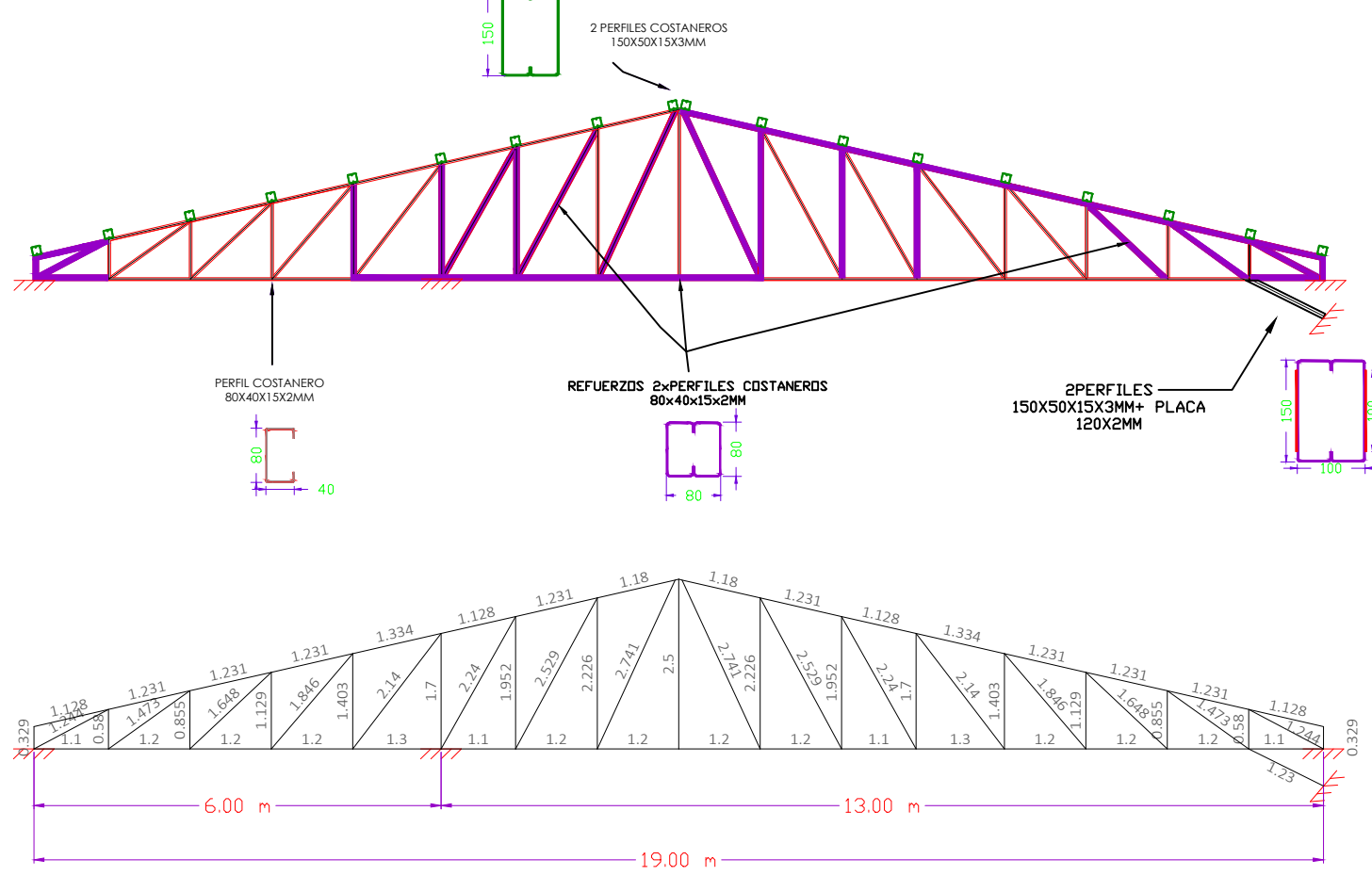
FECHA:	TJA. 19/09/2024
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DOCENTE:	ING. CARRASCO ARNOLD PAUL DENNIS
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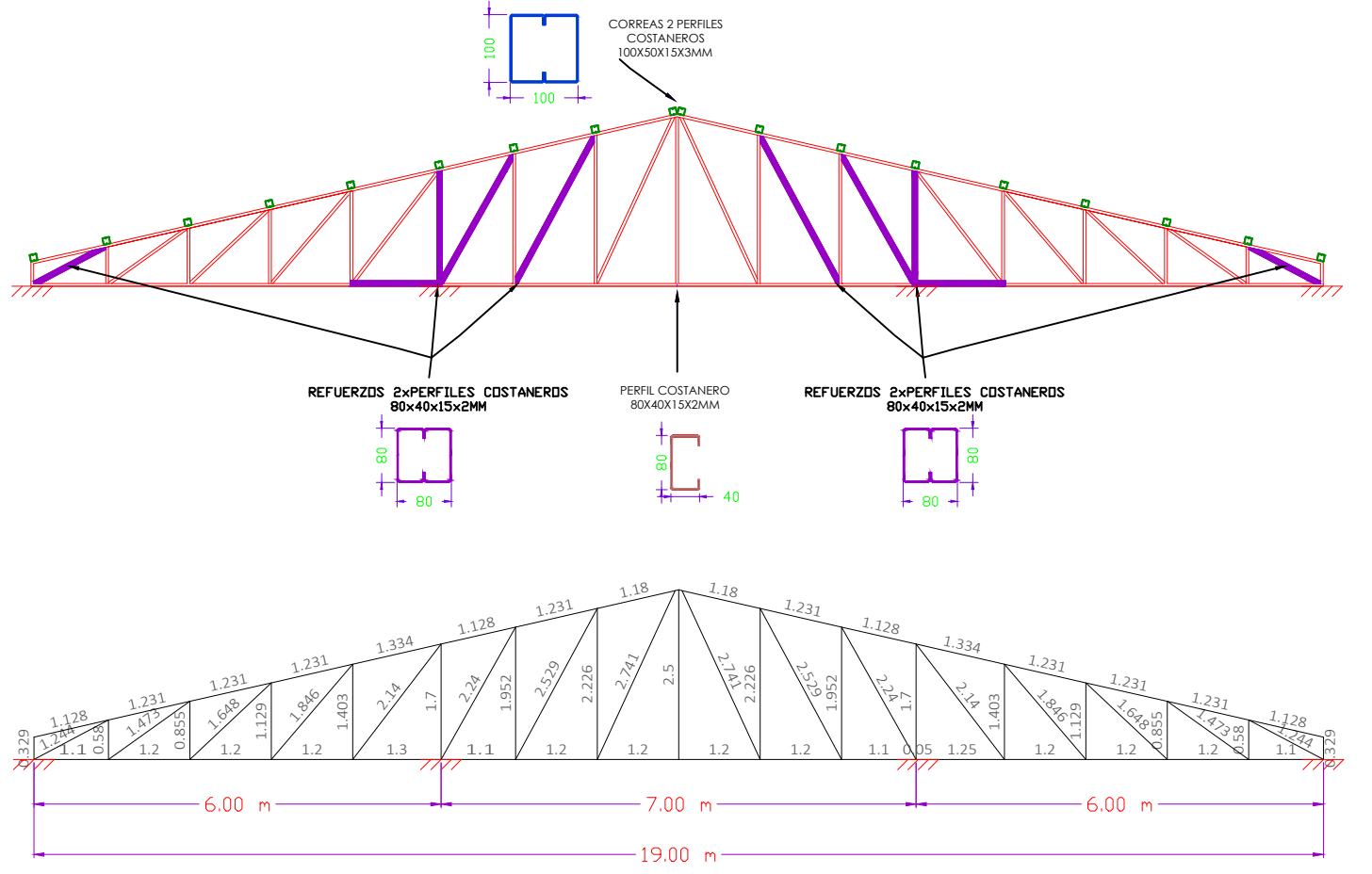
VISTA EN PLANTA ESTRUCTURA 1
ESC.:1:150



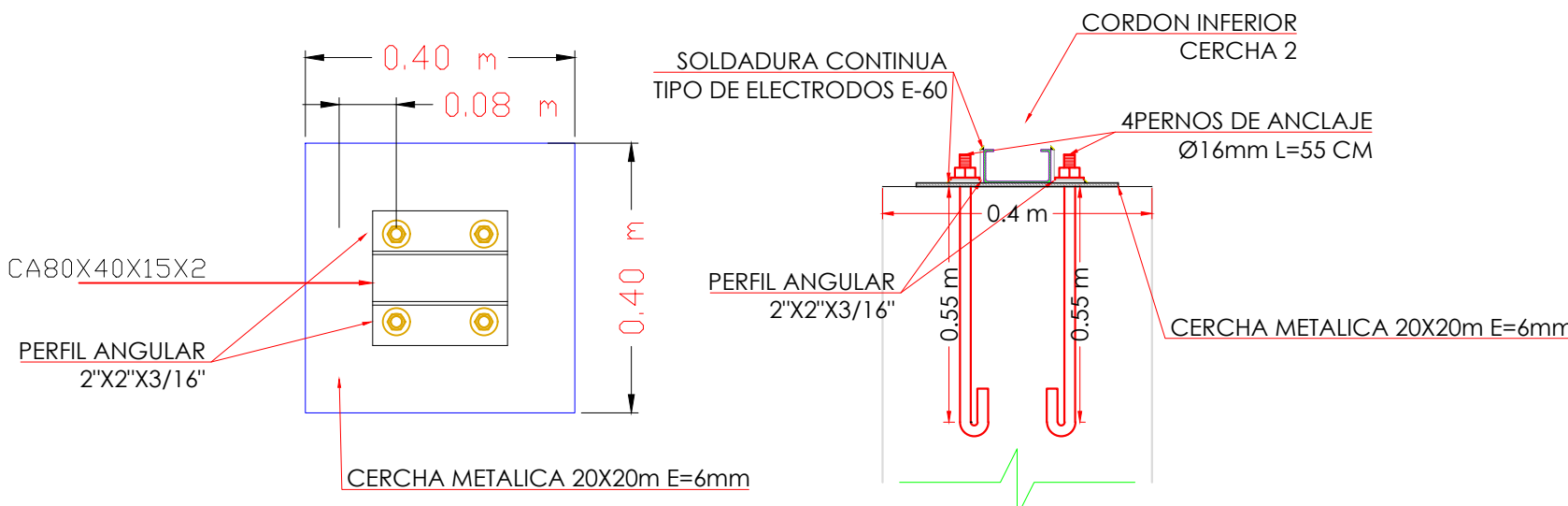
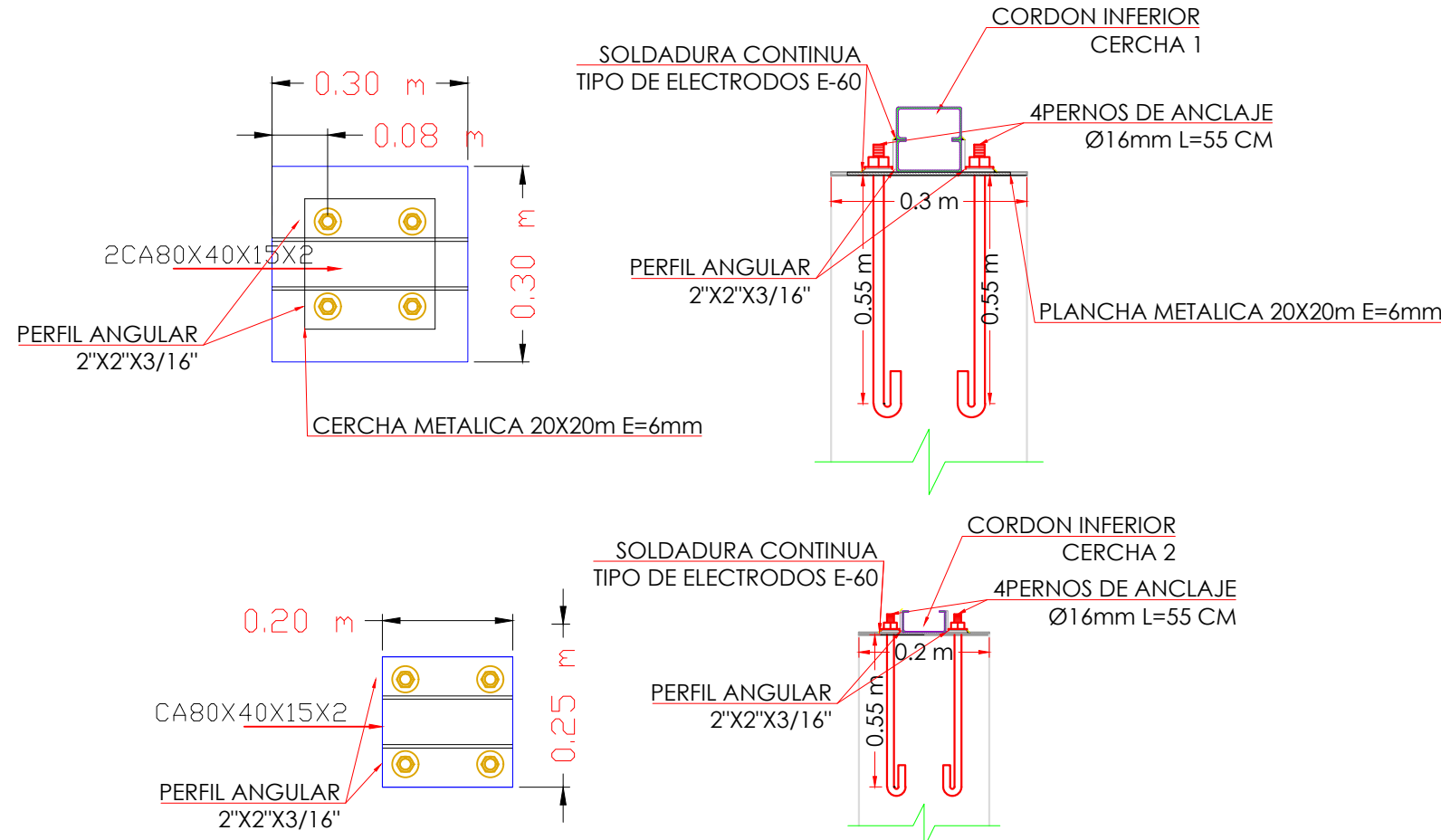
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ESC.:1:100



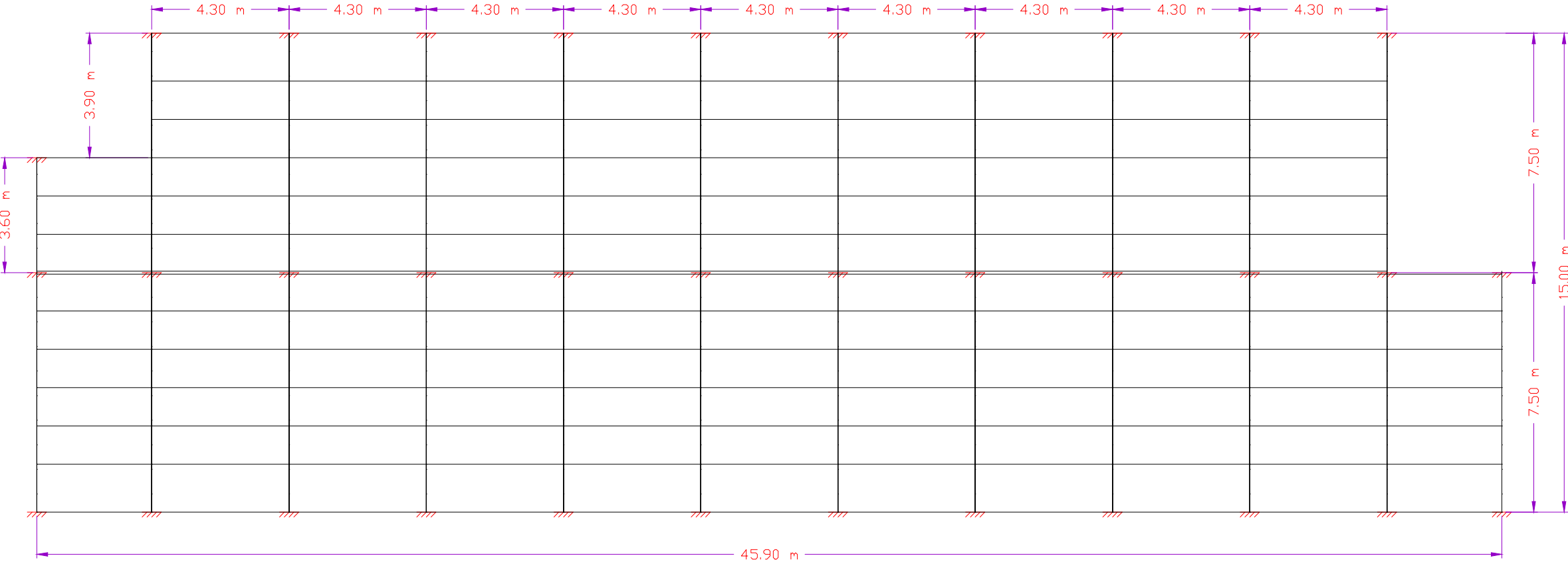
CORTE CERCHA SECUNDARIA ESTRUCTURA 1
ESC.:1:100



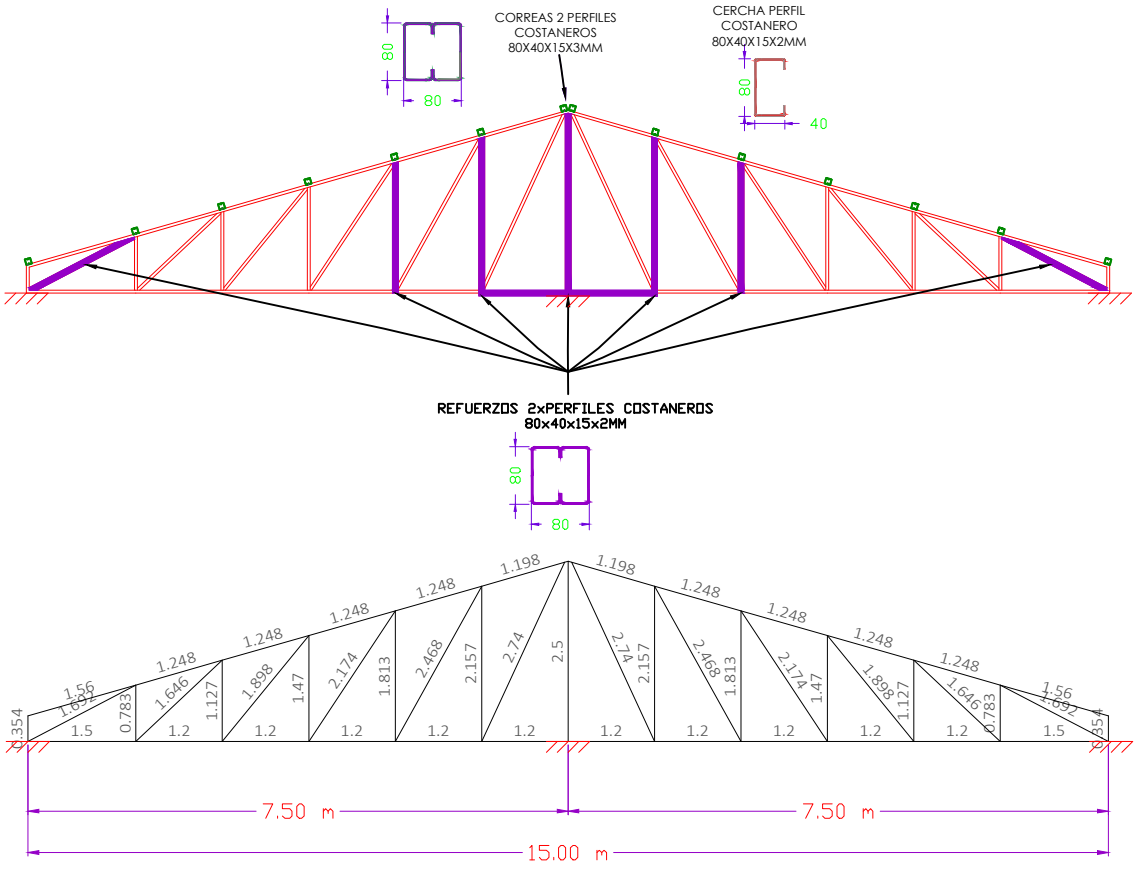
DETALLE DE UNION SOBRE COLUMNA Y VIGAS 1:10



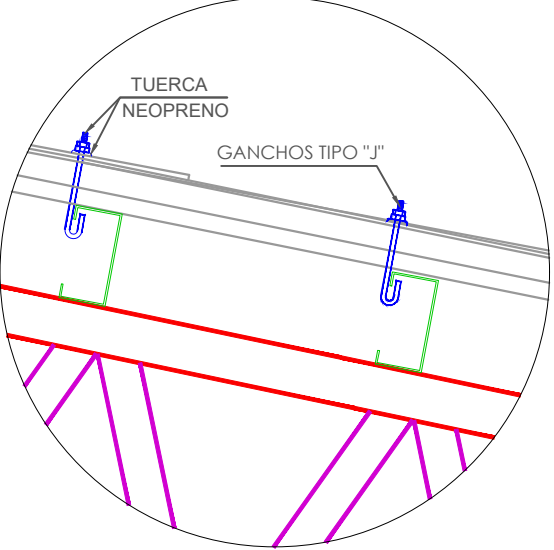
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ESC.:1:150

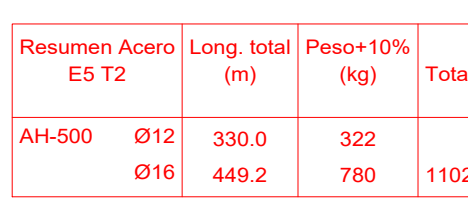
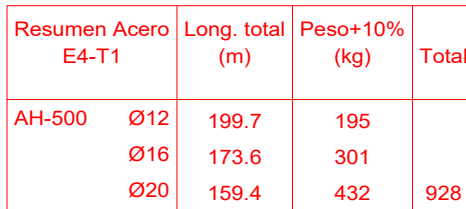
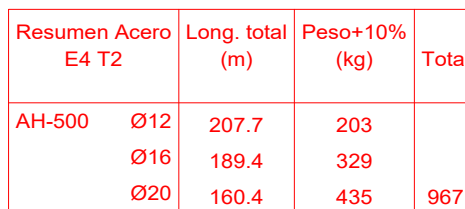
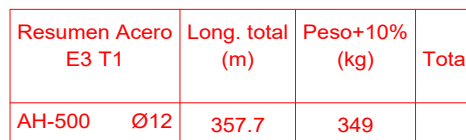
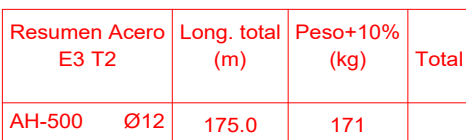
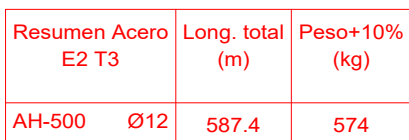
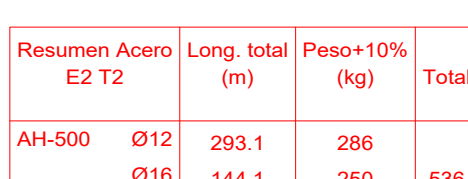
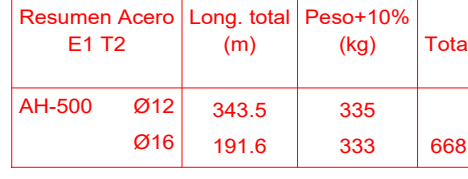
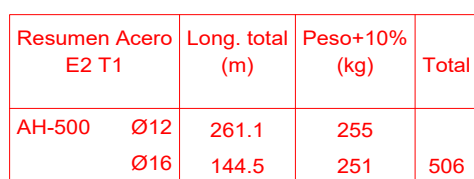
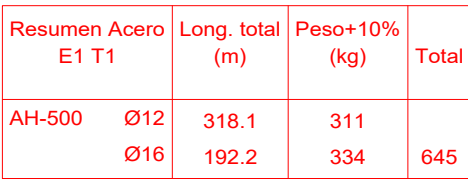


CORTE CERCHA ESTRUCTURA 2
ESC.:1:150



DETALLE DE CORREAS Y COBERTURA... S/ESC.





Elemento	Pos.	Diám.	No.	Long. (cm)	Total (cm)	A4/A40/A4500 (kg)	Elemento	Pos.	Diám.	No.	Long. (cm)	Total (cm)	A4/A40/A4500 (kg)	Elemento	Pos.	Diám.	No.	Long. (cm)	Total (cm)	A4/A40/A4500 (kg)
E3 T3 Traves 1	1	Ø16	6	270	270	10.0	E3 T3 Traves 2	1	Ø16	11	270	270	10.0	E4 T3 Traves 1	1	Ø16	7	270	270	10.0
	2	Ø16	6	270	540	20.0		2	Ø16	11	270	540	20.0		2	Ø16	7	270	540	20.0
	3	Ø16	6	270	810	30.0		3	Ø16	11	270	810	30.0		3	Ø16	7	270	810	30.0
	4	Ø16	6	270	1080	40.0		4	Ø16	11	270	1080	40.0		4	Ø16	7	270	1080	40.0
	5	Ø16	6	270	1350	50.0		5	Ø16	11	270	1350	50.0		5	Ø16	7	270	1350	50.0
	6	Ø16	6	270	1620	60.0		6	Ø16	11	270	1620	60.0		6	Ø16	7	270	1620	60.0
E3 T3 Traves 2	11	Ø16	6	270	1890	70.0	E3 T3 Traves 3	14	Ø16	11	270	2160	80.0	E3 T3 Traves 4	14	Ø16	11	270	2160	80.0
	12	Ø16	6	270	2160	80.0		15	Ø16	11	270	2430	90.0		15	Ø16	11	270	2430	90.0
	13	Ø16	6	270	2430	90.0		16	Ø16	11	270	2700	100.0		16	Ø16	11	270	2700	100.0
	14	Ø16	6	270	2700	100.0		17	Ø16	11	270	2970	110.0		17	Ø16	11	270	2970	110.0
	15	Ø16	6	270	3060	120.0		18	Ø16	11	270	3240	130.0		18	Ø16	11	270	3240	130.0
	16	Ø16	6	270	3330	130.0		19	Ø16	11	270	3510	140.0		19	Ø16	11	270	3510	140.0
E3 T3 Traves 3	22	Ø16	7	320	320	12.0	E3 T3 Traves 4	24	Ø16	8	320	320	12.0	E3 T3 Traves 5	24	Ø16	8	320	320	12.0
	23	Ø16	7	320	640	24.0		25	Ø16	8	320	640	24.0		25	Ø16	8	320	640	24.0
	24	Ø16	7	320	960	36.0		26	Ø16	8	320	960	36.0		26	Ø16	8	320	960	36.0
	25	Ø16	7	320	1280	48.0		27	Ø16	8	320	1280	48.0		27	Ø16	8	320	1280	48.0
	26	Ø16	7	320	1600	60.0		28	Ø16	8	320	1600	60.0		28	Ø16	8	320	1600	60.0
	27	Ø16	7	320	1920	72.0		29	Ø16	8	320	1920	72.0		29	Ø16	8	320	1920	72.0
E3 T3 Traves 4	32	Ø16	7	320	2240	84.0	E4 T3 Traves 1	33	Ø16	12	320	320	12.0	E4 T3 Traves 2	33	Ø16	12	320	320	12.0
	33	Ø16	7	320	2560	96.0		34	Ø16	12	320	640	24.0		34	Ø16	12	320	640	24.0
	34	Ø16	7	320	2880	108.0		35	Ø16	12	320	960	36.0		35	Ø16	12	320	960	36.0
	35	Ø16	7	320	3200	120.0		36	Ø16	12	320	1280	48.0		36	Ø16	12	320	1280	48.0
E3 T3 Traves 5	41	Ø16	7	320	3520	132.0	E4 T3 Traves 3	41	Ø16	12	320	1600	60.0	E4 T3 Traves 4	41	Ø16	12	320	1600	60.0
	42	Ø16	7	320	3840	144.0		42	Ø16	12	320	1920	72.0		42	Ø16	12	320	1920	72.0
	43	Ø16	7	320	4160	156.0		43	Ø16	12	320	2240	84.0		43	Ø16	12	320	2240	84.0
	44	Ø16	7	320	4480	168.0		44	Ø16	12	320	2560	96.0		44	Ø16	12	320	2560	96.0
	45	Ø16	7	320	4800	180.0		45	Ø16	12	320	2880	108.0		45	Ø16	12	320	2880	108.0
	46	Ø16	7	320	5120	192.0		46	Ø16	12	320	3200	120.0		46	Ø16	12	320	3200	120.0
E3 T3 Traves 6	48	Ø16	8	360	360	16.0	E4 T3 Traves 5	48	Ø16	12	320	3200	120.0	E4 T3 Traves 6	48	Ø16	12	320	3200	120.0
	49	Ø16	8	360	720	32.0		49	Ø16	12	320	6400	240.0		49	Ø16	12	320	6400	240.0
E3 T3 Traves 7	50	Ø16	8	360	1080	48.0	E4 T3 Traves 7	50	Ø16	12	320	9600	320.0	E4 T3 Traves 8	50	Ø16	12	320	9600	320.0
	51	Ø16	8	360	1440	64.0		51	Ø16	12	320	12800	426.7		51	Ø16	12	320	12800	426.7
E3 T3 Traves 8	52	Ø16	8	360	1800	80.0	E4 T3 Traves 9	52	Ø16	12	320	16000	560.0	E4 T3 Traves 10	52	Ø16	12	320	16000	560.0
	53	Ø16	8	360	2160	96.0		53	Ø16	12	320	19200	673.3		53	Ø16	12	320	19200	673.3
E3 T3 Traves 9	54	Ø16	8	360	2520	112.0	E4 T3 Traves 11	54	Ø16	12	320	22400	786.7	E4 T3 Traves 12	54	Ø16	12	320	22400	786.7
	55	Ø16	8	360	2880	128.0		55	Ø16	12	320	25600	893.3		55	Ø16	12	320	25600	893.3
E3 T3 Traves 10	56	Ø16	8	360	3240	144.0	E4 T3 Traves 13	56	Ø16	12	320	28800	1000.0	E4 T3 Traves 14	56	Ø16	12	320	28800	1000.0
	57	Ø16	8	360	3600	160.0		57	Ø16	12	320	32000	1106.7		57	Ø16	12	320	32000	1106.7
E3 T3 Traves 11	58	Ø16	8	360	3960	176.0	E4 T3 Traves 15	58	Ø16	12	320	35200	1213.3	E4 T3 Traves 16	58	Ø16	12	320	35200	1213.3
	59	Ø16	8	360	4320	192.0		59	Ø16	12	320	38400	1320.0		59	Ø16	12	320	38400	1320.0
E3 T3 Traves 12	60	Ø16	8	360	4680	208.0	E4 T3 Traves 17	60	Ø16	12	320	41600	1426.7	E4 T3 Traves 18	60	Ø16	12	320	41600	1426.7
	61	Ø16	8	360	5040	224.0		61	Ø16	12	320	44800	1533.3		61	Ø16	12	320	44800	1533.3
E3 T3 Traves 13	62	Ø16	8	360	5400	240.0	E4 T3 Traves 19	62	Ø16	12	320	48000	1640.0	E4 T3 Traves 20	62	Ø16	12	320	48000	1640.0
	63	Ø16	8	360	5760	256.0		63	Ø16	12	320	51200	1746.7		63	Ø16	12	320	51200	1746.7
E3 T3 Traves 14	64	Ø16	8	360	6120	272.0	E4 T3 Traves 21	64	Ø16	12	320	54400	1853.3	E4 T3 Traves 22	64	Ø16	12	320	54400	1853.3
	65	Ø16	8	360	6480	288.0		65	Ø16	12	320	57600	1960.0		65	Ø16	12	320	57600	1960.0
E3 T3 Traves 15	66	Ø16	8	360	6840	304.0	E4 T3 Traves 23	66	Ø16	12	320	60800	2066.7	E4 T3 Traves 24	66	Ø16	12	320	60800	2066.7
	67	Ø16	8	360	7200	320.0		67	Ø16	12	320	64000	2173.3		67	Ø16	12	320	64000	2173.3
E3 T3 Traves 16	68	Ø16	8	360	7560	336.0	E4 T3 Traves 25	68	Ø16	12	320	67200	2280.0	E4 T3 Traves 26	68	Ø16	12	320	67200	2280.0
	69	Ø16	8	360	7920	352.0		69	Ø16	12	320	70400	2386.7		69	Ø16	12	320	70400	2386.7
E3 T3 Traves 17	70	Ø16	8	360	8280	368.0	E4 T3 Traves 27	70	Ø16	12	320	73600	2493.3	E4 T3 Traves 28	70	Ø16	12	320	73600	2493.3
	71	Ø16	8	360	8640	384.0		71	Ø16	12	320	76800	2600.0		71	Ø16	12	320	76800	2600.0
E3 T3 Traves 18	72	Ø16	8	360	9000	400.0	E4 T3 Traves 29	72	Ø16	12	320	80000	2706.7	E4 T3 Traves 30	72	Ø16	12	320	80000	2706.7
	73	Ø16	8	360	9360	416.0		73	Ø16	12	320	83200	2813.3		73	Ø16	12	320	83200	2813.3
E3 T3 Traves 19	74	Ø16	8	360	9720	432.0	E4 T3 Traves 31	74	Ø16	12	320	86400	2920.0	E4 T3 Traves 32	74	Ø16	12	320	86400	2920.0
	75	Ø16	8	360	10080	448.0		75	Ø16	12	320	89600	3026.7		75	Ø16	12	320	89600	3026.7
E3 T3 Traves 20	76	Ø16	8	360	10440	464.0	E4 T3 Traves 33	76	Ø16	12	320	92800	3133.3	E4 T3 Traves 34	76	Ø16	12	320	92800	3133.3
	77	Ø16	8	360	10800	480.0		77	Ø16	12	320	96000	3240.0		77	Ø16	12	320	96000	3240.0
E3 T3 Traves 21	78	Ø16	8	360	11160	496.0	E4 T3 Traves 35	78	Ø16	12	320	99200	3346.7	E4 T3 Traves 36	78	Ø16	12	320	99200	3346.7
	79	Ø16	8	360	11520	512.0		79	Ø16	12	320	102400	3453.3		79	Ø16	12	320	102400	3453.3
E3 T3 Traves 22	80	Ø16	8	360	11880	528.0	E4 T3 Traves 37	80	Ø16	12	320	105600	3560.0	E4 T3 Traves 38	80	Ø16	12	320	105600	3560.0
	81	Ø16	8	360	12240	544.0		81	Ø16	12	320	108800	3666.7		81	Ø16	12	320	108800	3666.7
E3 T3 Traves 23	82	Ø16	8	360	12600	560.0	E4 T3 Traves 39	82	Ø16	12	320	112000	3773.3	E4 T3 Traves 40	82	Ø16	12	320	112000	3773.3
	83	Ø16	8	360	12960	576.0		83	Ø16	12	320	115200	3880.0		83	Ø16	12	320	115200	3880.0
E3 T3 Traves 24	84	Ø16	8	360	13320	592.0	E4 T3 Traves 41	84	Ø16	12	320	118400	3986.7	E4 T3 Traves 42	84	Ø16	12	320	118400	3986.7
	85	Ø16	8	360	13680	608.0		85	Ø16	12	320	121600	4093.3		85	Ø16	12	320	121600	4093.3
E3 T3 Traves 25	86	Ø16	8	360	14040	624.0	E4 T3 Traves 43	86	Ø16	12	320	124800	4200.0	E4 T3 Traves 44	86	Ø16	12	320	124800	4200.0
	87	Ø16	8	360	14400	640.0		87	Ø16	12	320	128000	4306.7		87	Ø16	12	320	128000	4306.7
E3 T3 Traves 26	88	Ø16	8	360	14760	656.0	E4 T3 Traves 45	88	Ø16	12	320	131200	4413.3	E4 T3 Traves 46	88	Ø16	12	320	131200	4413.3
	89	Ø16	8	360	15120	672.0		89	Ø16	12	320	134400	4520.0		89	Ø16	12	320	134400	4520.0
E3 T3 Traves 27	90	Ø16	8	360	15480	688.0	E4 T3 Traves 47	90	Ø16	12	320	137600	4626.7	E4 T3 Traves 48	90	Ø16	12	320	137600	4626.7
	91	Ø16	8	360	15840	704.0		91	Ø16	12	320	140800	4733.3		91	Ø16	12	320</		