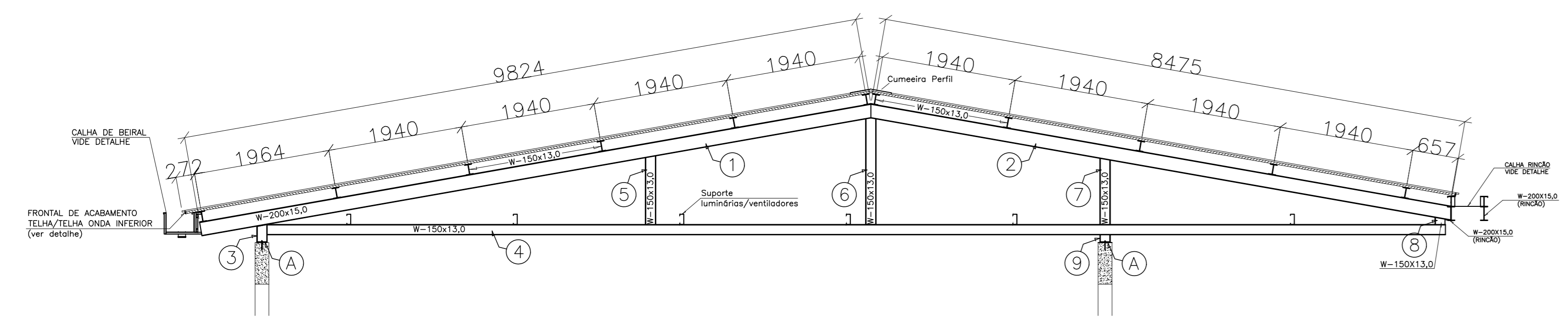
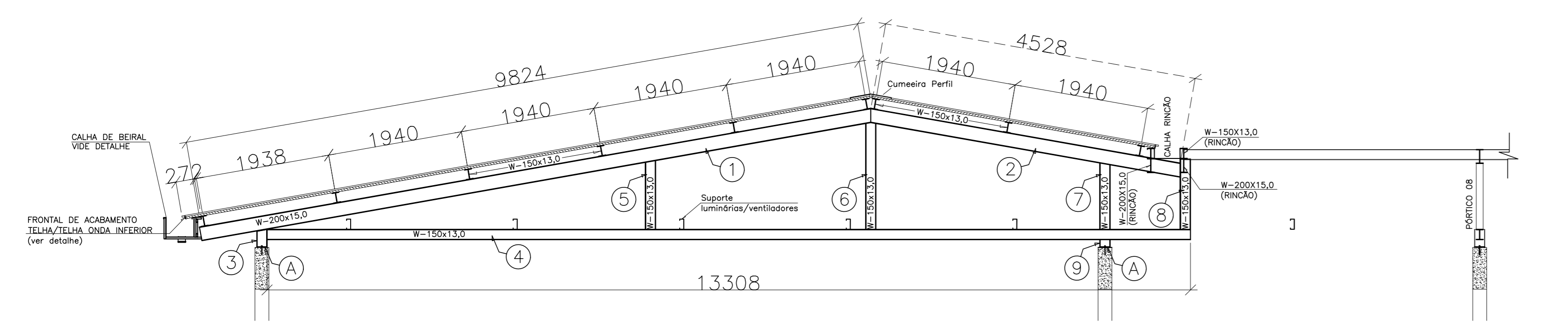


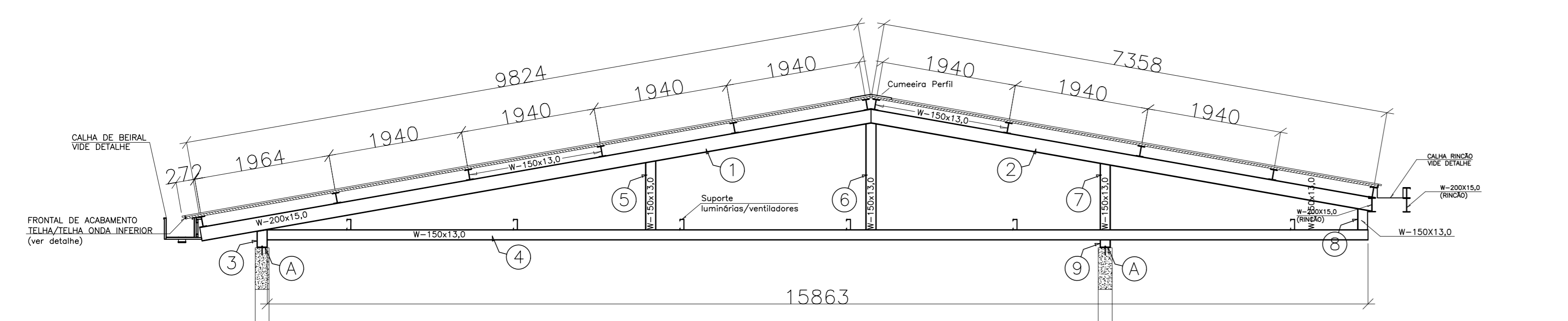
PORTICO 01 - BLOCO 03 (1x)  
ESCALA: 1/50



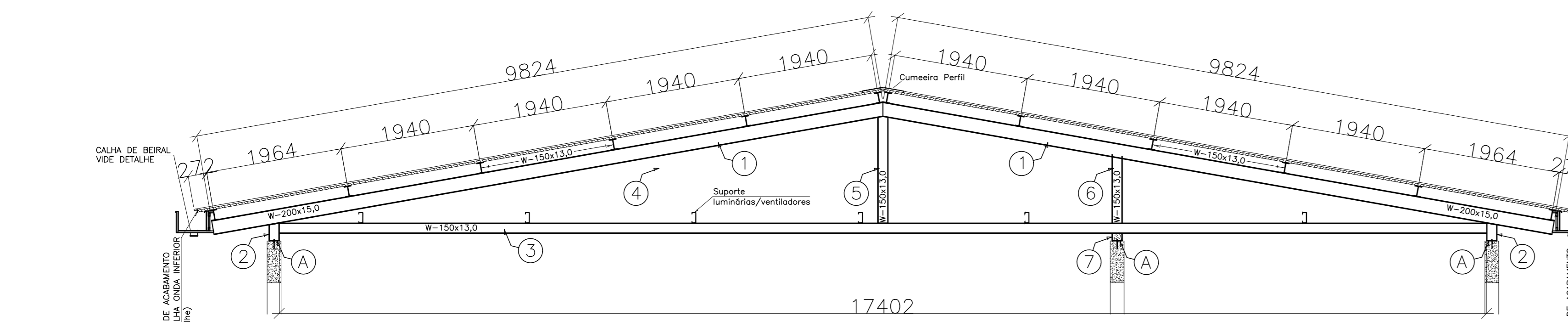
PORTICO 02 - BLOCO 03 (1x)  
ESCALA: 1/50



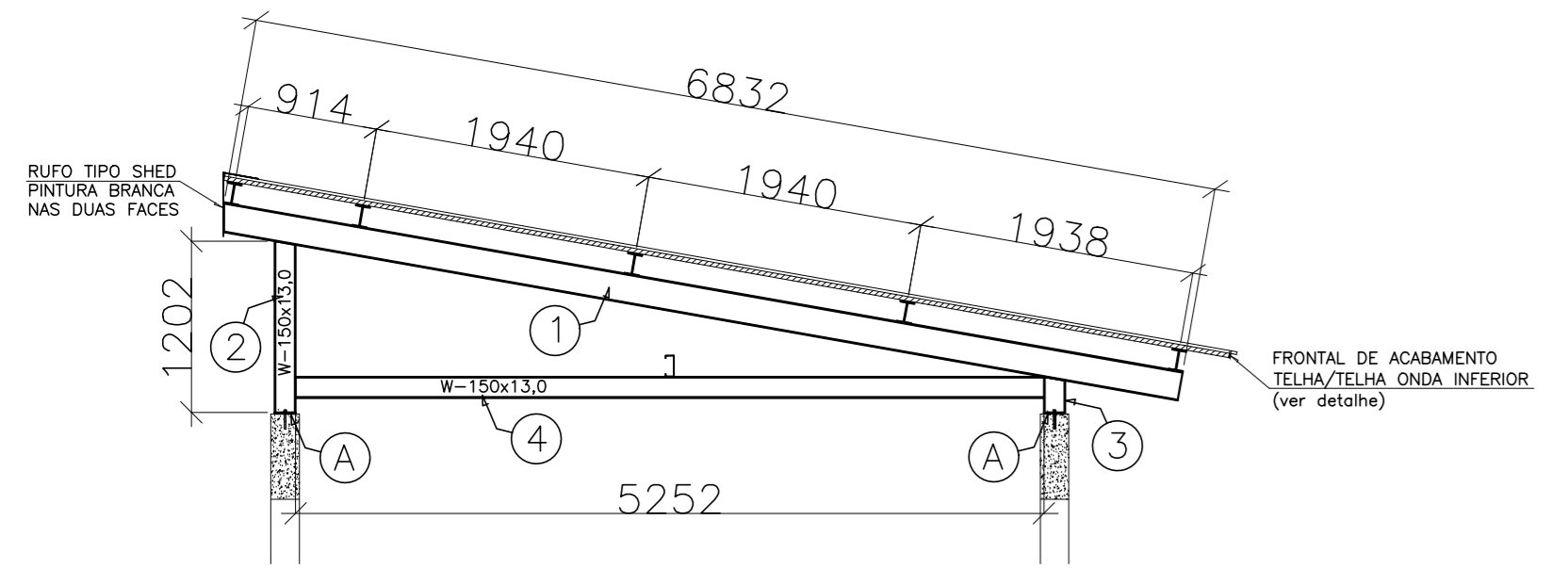
PORTICO 03 - BLOCO 03 (1x)  
ESCALA: 1/50



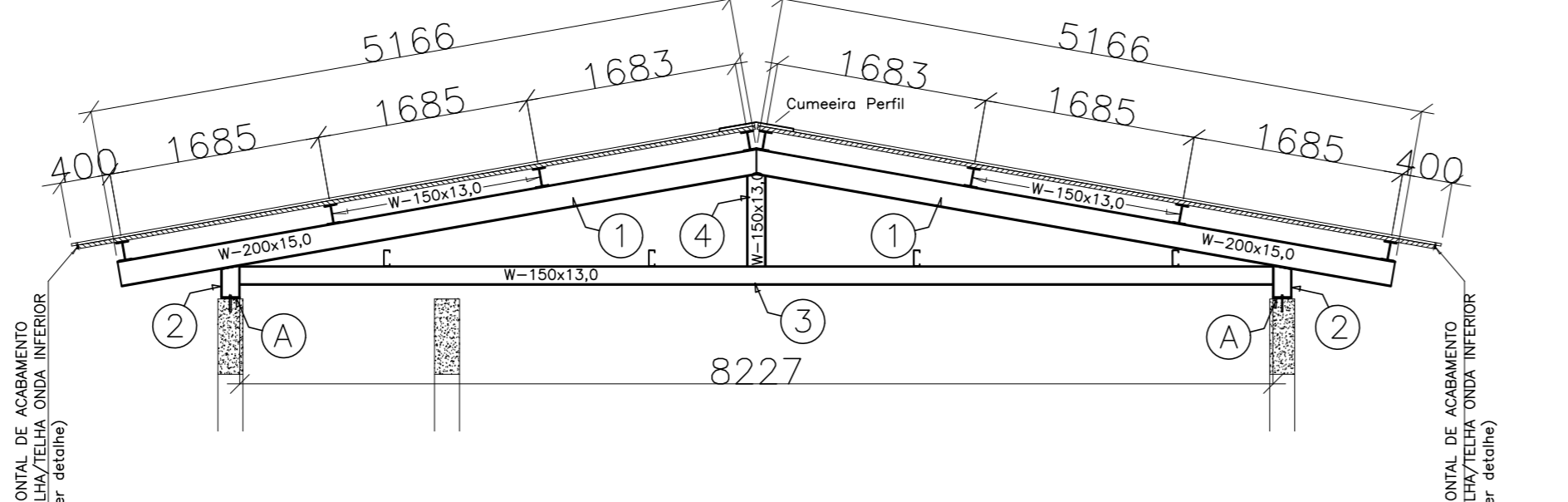
PORTICO 04 = 05 = 06 - BLOCO 03 (3x)  
ESCALA: 1/50



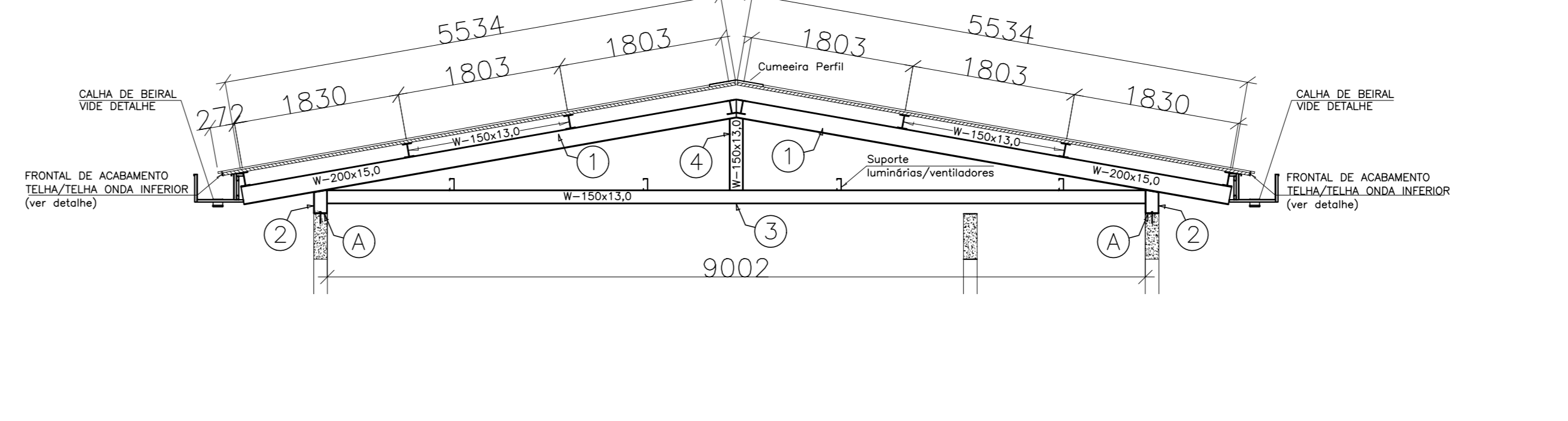
PORTICO 07 - BLOCO 03 (1x)  
ESCALA: 1/50



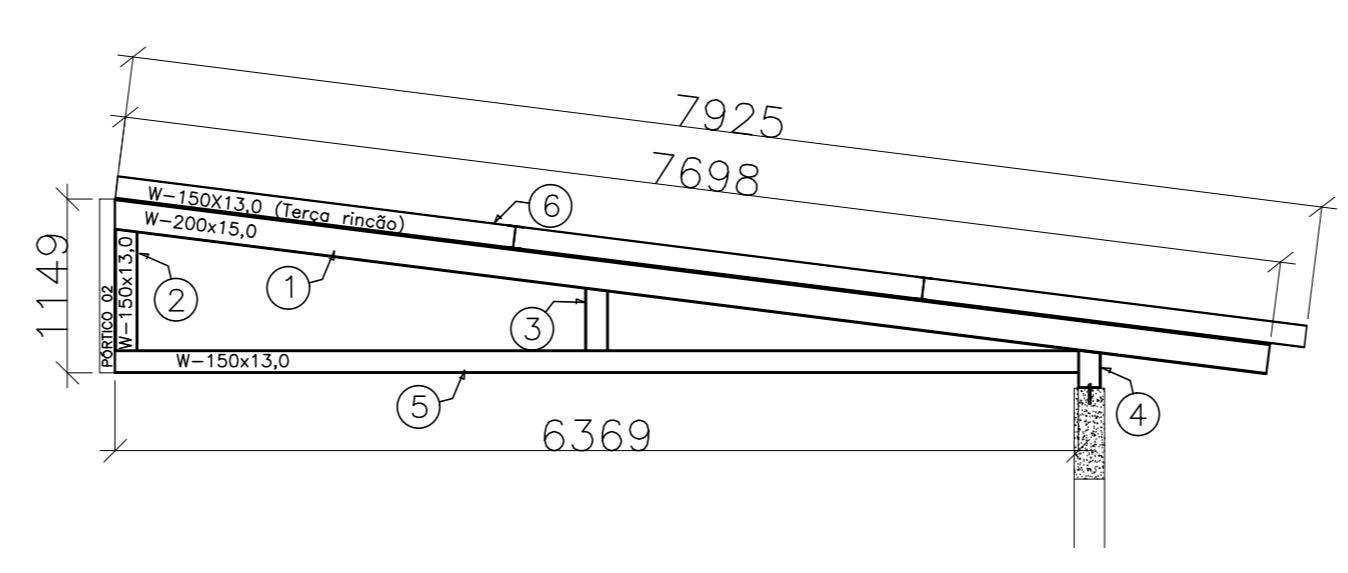
PORTICO 22 = 23 = 24 = 25 = 26 = 27 = 28 = 29 = 30 = 31 = 32 (11x)  
ESCALA: 1/50 BLOCO 04



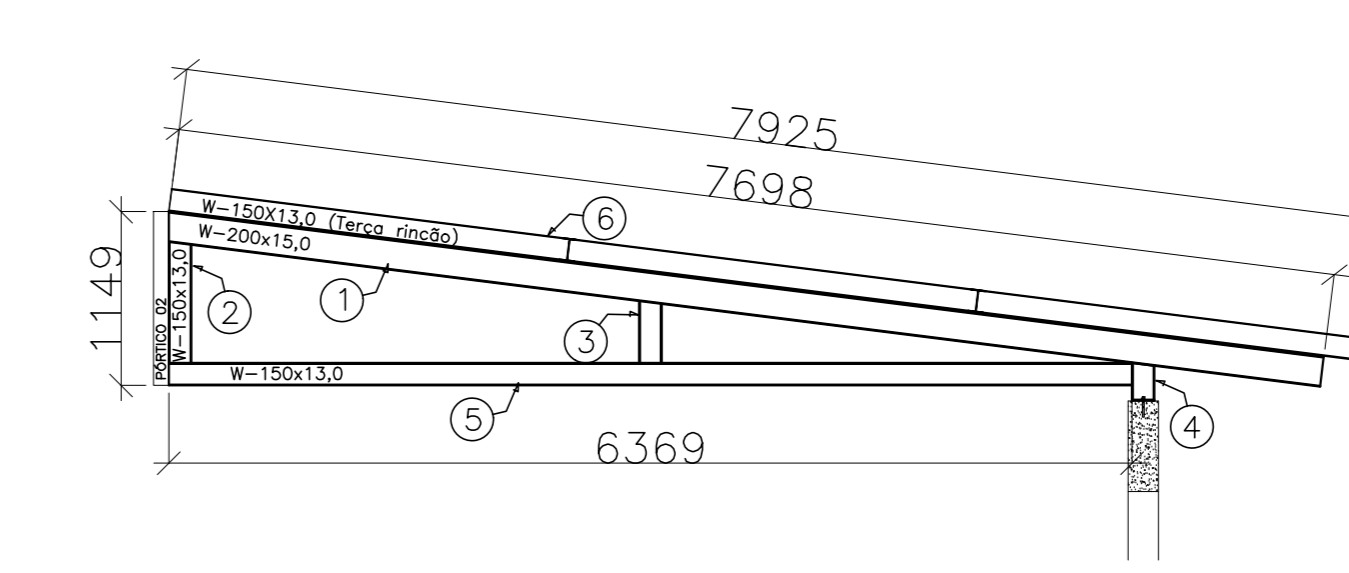
PORTICO 08=09=10=11=12=13=14=15=16=17=18=19=20=21=22 (15x)  
ESCALA: 1/50 BLOCO 03



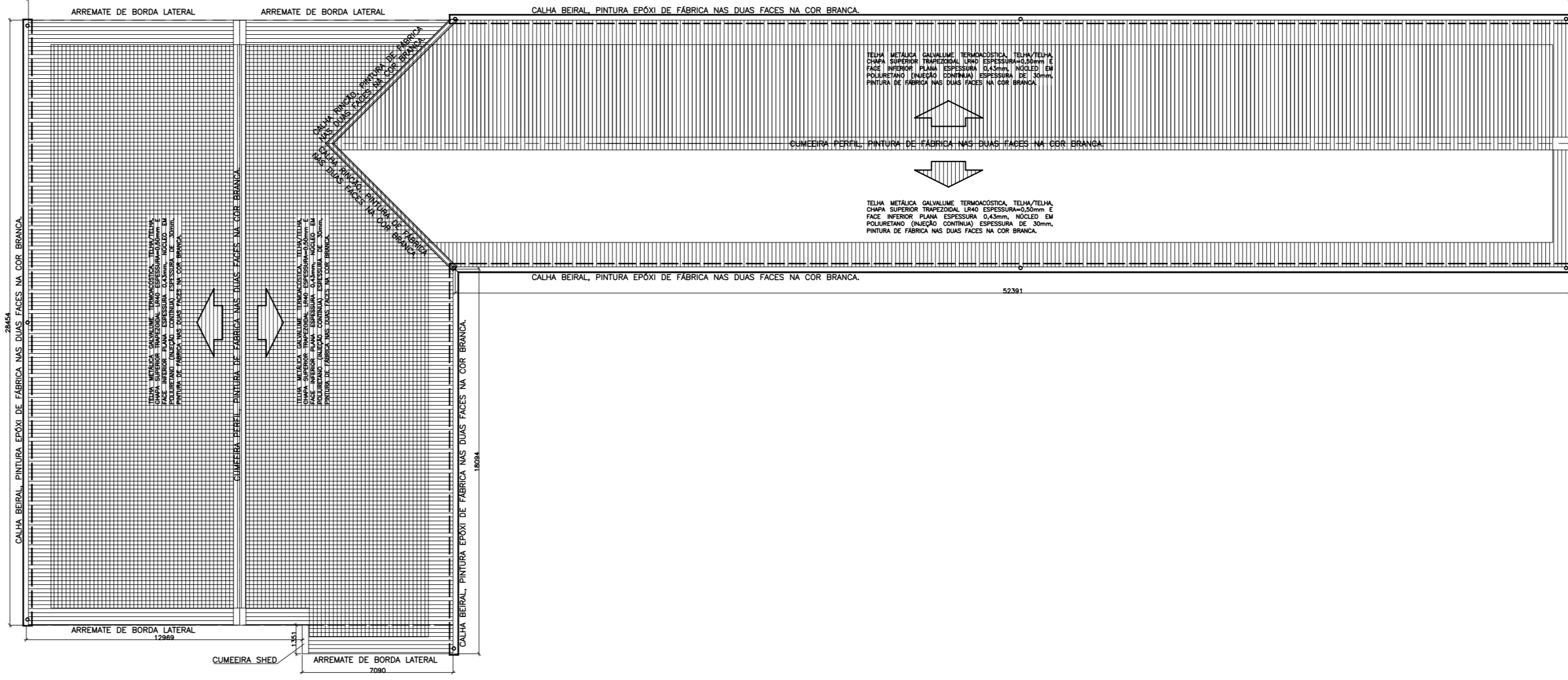
VIGA RINÇÃO 01 = 02 (2x)  
ESCALA: 1/50 BLOCO 03



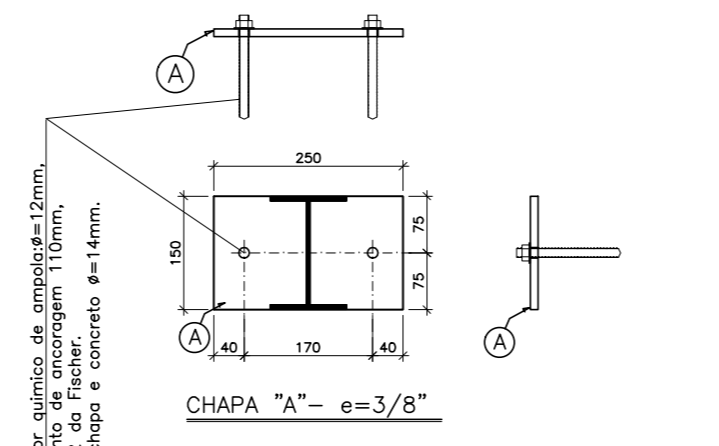
VIGA RINÇÃO 01 = 02 (2x)  
ESCALA: 1/50 BLOCO 03



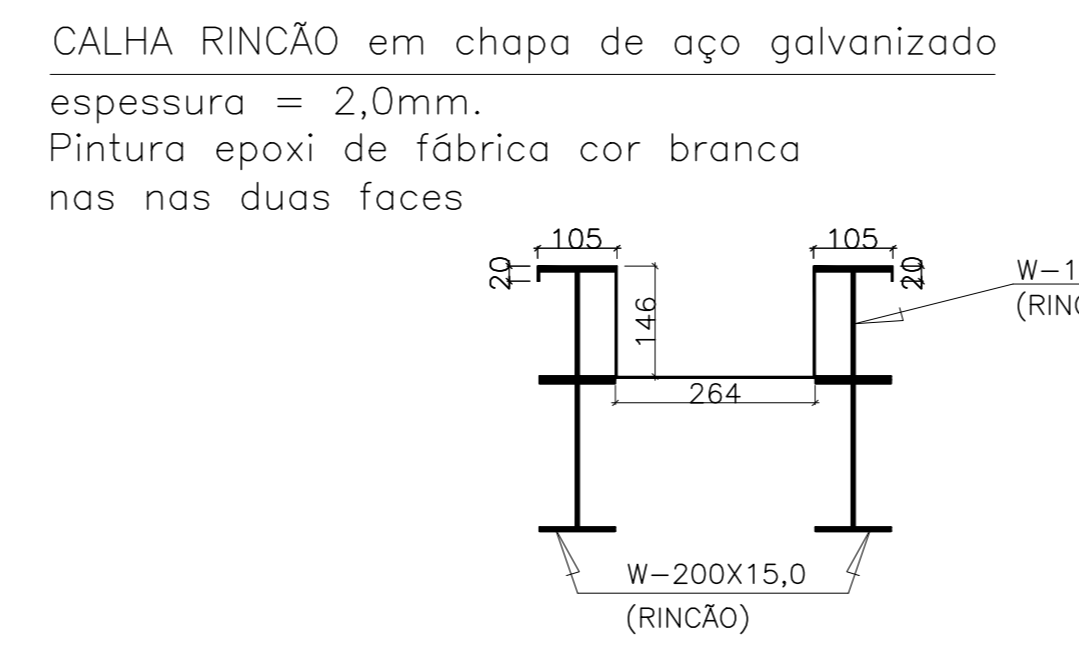
BLOCO 03 - PROJEÇÃO DO TELHADO  
ESCALA: 1/200



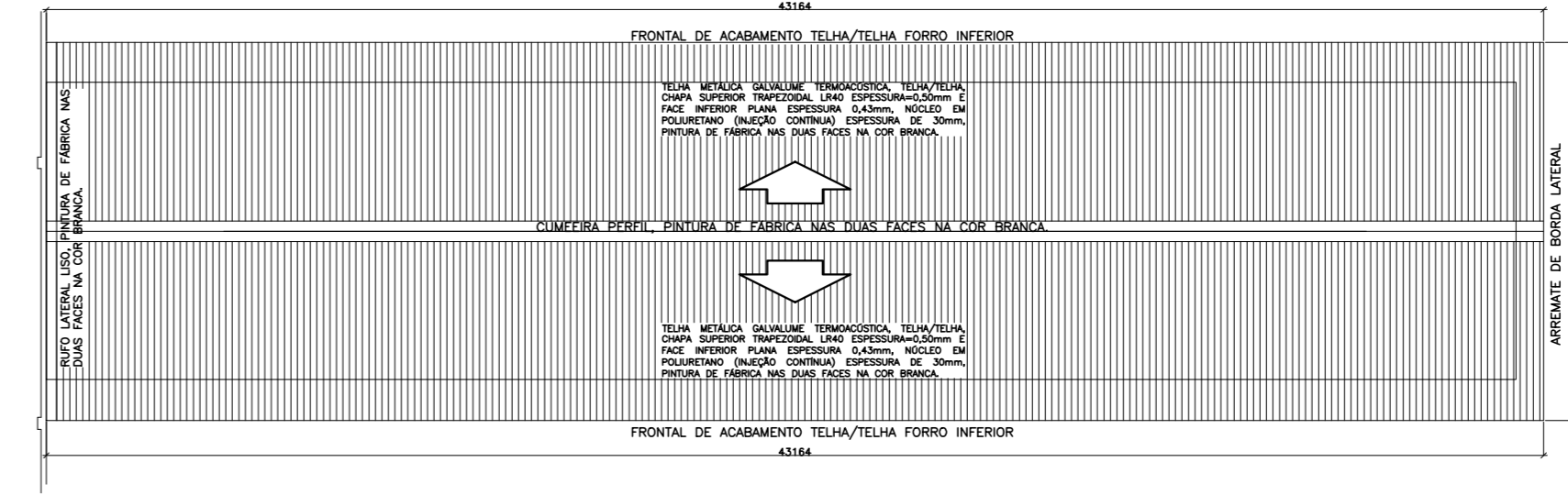
PLACA P/ ANCORAGEM PÓRTICOS  
ESCALA: 1/10



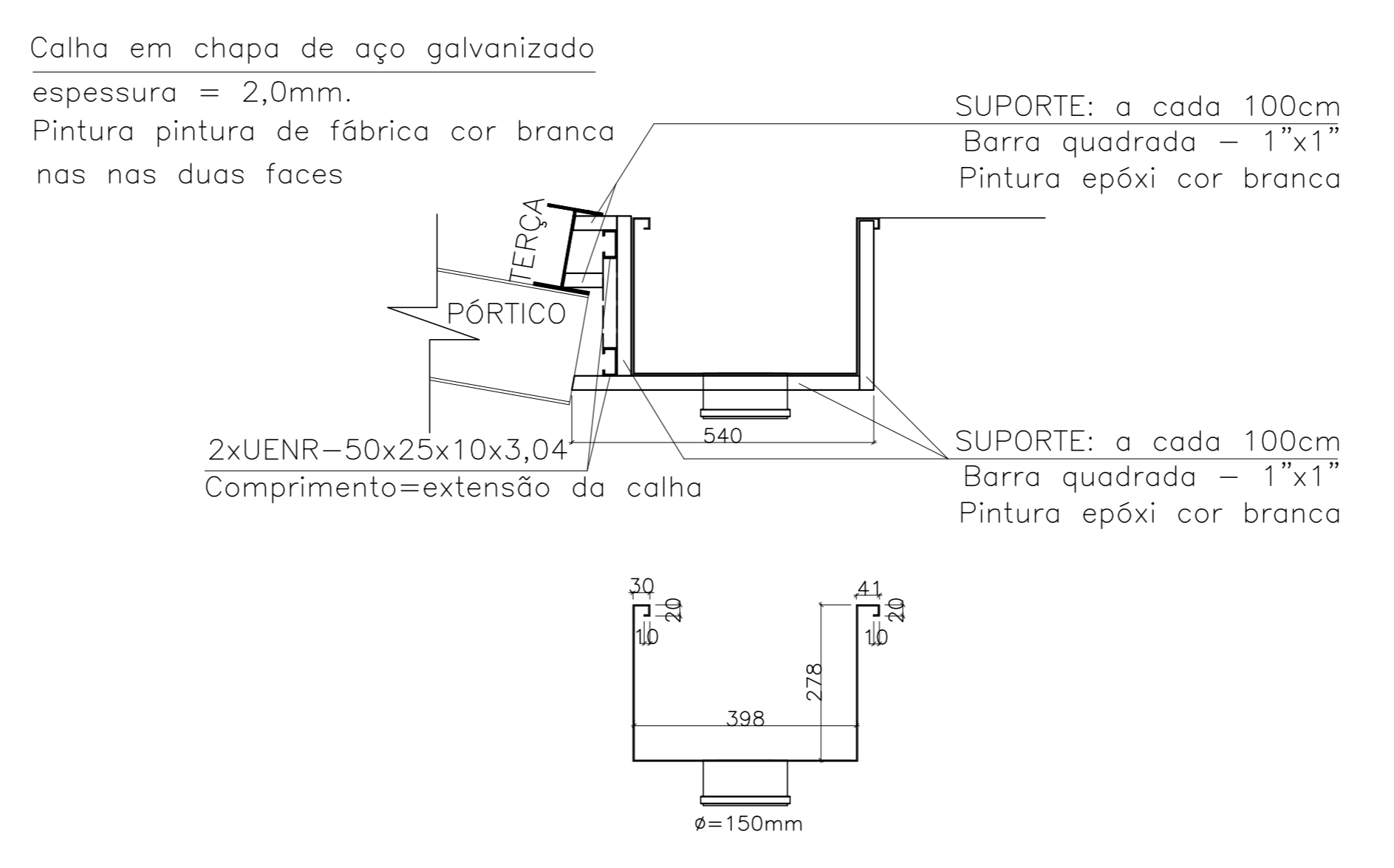
DETALHE: SEÇÃO DA CALHA RINÇÃO  
ESCALA: 1/10



BLOCO 04 - PROJEÇÃO DO TELHADO  
ESCALA: 1/100



DETALHE: SEÇÃO DA CALHA BEIRAL E SUPORTE  
ESCALA: 1/10



DETALHE: VISTA SUPORTE PARA CALHA BEIRAL  
ESCALA: 1/25

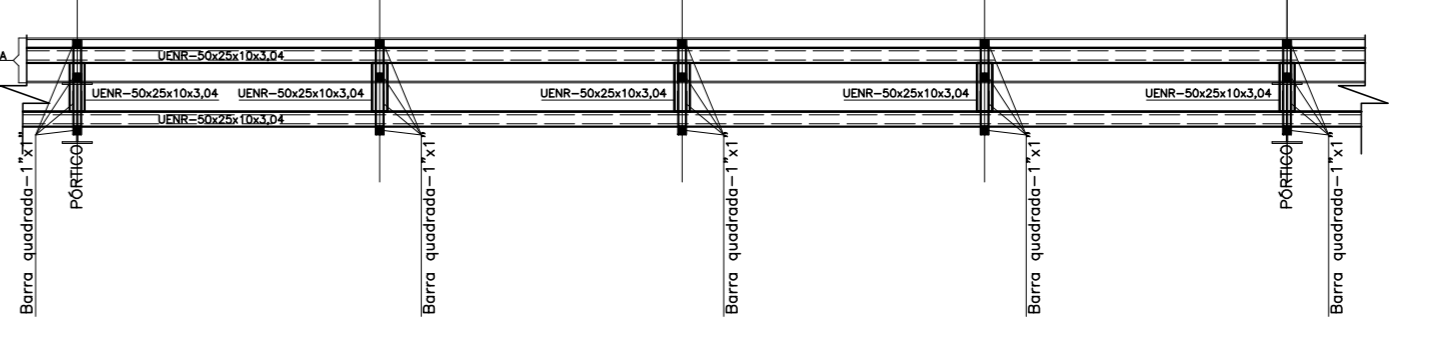


TABELA DE MATERIAIS										
ESTRUT	POS	PERFIL	SEÇÃO (mm)	QUANT	COMPRIMENTO		PESO			
					UNIT (mm)	TOTAL (m)		UNIT (kg/m)	TOTAL (kg)	
<b>BLOCO 03</b>										
PORTICO 01	1	I	W-200x15,0	1	9824	9,824	147,36			
	2	I	W-150x13,0	2	848	16,96	127,13			
	3	I	W-150x13,0	2	250	0,50	33,00			
	4	I	W-150x13,0	1	16800	16,800	226,14			
	5	I	W-150x13,0	1	990	0,99	33,00			
	6	I	W-150x13,0	1	1524	1,524	33,00			
	7	I	W-150x13,0	1	955	0,955	33,00			
	8	I	W-150x13,0	1	105	0,11	33,00			
	9	I	W-150x13,0	1	102	0,102	33,00			
	A	CHAPA	150x200x3/8"	2	0,0375	0,08	74,58			
CHAMA - QUAM 8-12mm							2	2	4,00	
<b>PESO TOTAL PORTICO 01</b>							<b>558,11</b>			
PORTICO 02	1	I	W-200x15,0	1	9824	9,824	147,36			
	2	I	W-150x13,0	1	478	4,78	33,00			
	3	I	W-150x13,0	2	250	0,50	33,00			
	4	I	W-150x13,0	1	13160	13,160	171,08			
	5	I	W-150x13,0	1	990	0,99	33,00			
	6	I	W-150x13,0	1	1524	1,52	33,00			
	7	I	W-150x13,0	1	955	0,96	33,00			
	8	I	W-150x13,0	1	1002	1,00	33,00			
	9	I	W-150x13,0	1	102	0,102	33,00			
	A	CHAPA	150x200x3/8"	2	0,0375	0,08	74,58			
CHAMA - QUAM 8-12mm							2	2	4,00	
<b>PESO TOTAL PORTICO 02</b>							<b>455,65</b>			
PORTICO 03	1	I	W-200x15,0	1	9824	9,824	147,36			
	2	I	W-150x13,0	1	748	7,48	33,00			
	3	I	W-150x13,0	2	250	0,50	33,00			
	4	I	W-150x13,0	1	13663	13,663	182,22			
	5	I	W-150x13,0	1	990	0,99	33,00			
	6	I	W-150x13,0	1	1524	1,52	33,00			
	7	I	W-150x13,0	1	955	0,96	33,00			
	8	I	W-150x13,0	1	1002	1,00	33,00			
	9	I	W-150x13,0	1	102	0,102	33,00			
	A	CHAPA	150x200x3/8"	2	0,0375	0,08	74,58			
CHAMA - QUAM 8-12mm							2	2	4,00	
<b>PESO TOTAL PORTICO 03</b>							<b>526,22</b>			
PORTICO 04	1	I	W-200x15,0	1	9824	9,824	147,36			
	2	I	W-150x13,0	2	250	0,50	33,00			
	3	I	W-150x13,0	1	17402	17,402	226,23			
	4	I	W-150x13,0	1	13663	13,663	182,22			
	5	I	W-150x13,0	1	990	0,99	33,00			
	6	I	W-150x13,0	1	1524	1,52	33,00			
	7	I	W-150x13,0	1	955	0,96	33,00			
	8	I	W-150x13,0	1	1002	1,00	33,00			
	9	I	W-150x13,0	1	102	0,102	33,00			
	A	CHAPA	150x200x3/8"	2	0,0375	0,11	74,58			
CHAMA - QUAM 8-12mm							2	2	4,00	
<b>PESO TOTAL PORTICO 04</b>							<b>582,26</b>			
<b>PORT 05 PESO TOTAL PORTICO 05 - PORTICO 04</b>							<b>582,26</b>			
<b>PORT 06 PESO TOTAL PORTICO 06 - PORTICO 04</b>							<b>582,26</b>			
PORTICO 07	1	I	W-200x15,0	1	9824	9,824	147,36			
	2	I	W-150x13,0	1	102	1,02	33,00			
	3	I	W-150x13,0	1	250	0,25	33,00			
	4	I	W-150x13,0	1	955	0,955	33,00			
	A	CHAPA	150x200x3/8"	2	0,0375	0,08	74,58			
CHAMA - QUAM 8-12mm							2	2	4,00	
<b>PESO TOTAL PORTICO 07</b>							<b>193,93</b>			
PORTICO 08	1	I	W-200x15,0	2	5534	11,07	166,02			
	2	I	W-150x13,0	2	250	0,50	33,00			
	3	I	W-150x13,0	1	9002	9,00	117,09			
	4	I	W-150x13,0	1	107	0,11	33,00			
	A	CHAPA	150x200x3/8"	2	0,0375	0,08	74,58			
CHAMA - QUAM 8-12mm							2	2	4,00	
<b>PESO TOTAL PORTICO 08</b>							<b>305,63</b>			
PORT 09	<b>AD</b>									
	<b>PESO TOTAL PORTICO 09 AD 21 - EXPORTE 08</b>							<b>1.973,30</b>		
VIGA RINÇÃO 01	1	I	W-200x15,0	1	7798	7,798	116,97			
	2	I	W-150x13,0	1	810	0,81	33,00			
	3	I	W-150x13,0	1	410	0,41	33,00			
	4	I	W-150x13,0	1	280	0,28	33,00			
	5	I	W-150x13,0	1	6369	6,37	87,80			
	6	I	W-150x13,0	1	7925	7,93	105,03			
	A	CHAPA	150x200x3/8"	1	0,0375	0,04	74,58			
	CHAMA - QUAM 8-12mm							1	2	2,00
	<b>PESO TOTAL VIGA RINÇÃO 01</b>							<b>324,57</b>		
	<b>VIRVIG 02 PESO TOTAL VIGA RINÇÃO 02 - VIRVIG 03</b>							<b>324,57</b>		
VIGA RINÇÃO 03	1	I	W-200x15,0	1	8107	8,11	110,55			
	2	I	W-150x13,0	1	805	0,81	33,00			
	3	I	W-150x13,0	1	407	0,41	33,00			
	4	I	W-150x13,0	1	250	0,25	33,00			
	5	I	W-150x13,0	1	6740	6,74	87,62			
	6	I	W-150x13,0	1	8112	8,11	108,06			
A	CHAPA	150x200x3/8"	1	0,0375	0,04	74,58				
CHAMA - QUAM 8-12mm							1	2	2,00	
<b>PESO TOTAL VIGA RINÇÃO 03</b>							<b>330,24</b>			
<b>VIRVIG 05 PESO TOTAL VIGA RINÇÃO 04 - VIRVIG 03</b>							<b>330,24</b>			
TELHAS	1	I	W-150x13,0	2	12555	125,11	13,00			
	2	I	W-150x13,0	2	34525	345,05	14,00			
	3	I	W-150x13,0	2	54555	545,20	11,00			
	4	I	W-150x13,0	2	58117	581,23	11,00			
	5	I	W-150x13,0	9	3303	33,03	127,95			
	6	I	W-150x13,0	1	3588	3,59	33,00			
	6a	I	W-150x13,0	1	22699	22,70	33,00			
	7	I	W-150x13,0	1	1678	1,68	33,00			
	7a	I	W-150x13,0	1	20159	20,16	33,00			
	8	I	W-150x13,0	1	1851	1,85	33,00			
9	I	W-150x13,0	1	2300	2,30	33,00				
<b>PESO TOTAL TELHAS</b>							<b>6.961,08</b>			
<b>SUB TOTAL PESO BLOCO 03 (kg)</b>							<b>18.466,21</b>			
<b>BLOCO 04</b>										
PORTICO 22	1	I	W-200x15,0	2	5166	10,33	154,98			
	2	I	W-150x13,0	2	250	0,50	33,00			
	3	I	W-150x13,0	1	8227	8,23	109,95			
	4	I	W-150x13,0	1	730	0,73	33,00			
	A	CHAPA	150x200x3/8"	2	0,0375	0,08	74,58			
CHAMA - QUAM 8-12mm							2	2	4,00	
<b>PESO TOTAL PORTICO 22</b>							<b>283,51</b>			
PORT 23	<b>AD</b>									
	<b>PESO TOTAL PORTICO 23 AD 32 - EXPORTE 22</b>							<b>2.835,15</b>		
TELHAS	<b>AD</b>									
	<b>PESO TOTAL TELHAS</b>							<b>5.602,22</b>		
<b>SUB TOTAL PESO BLOCO 04 (kg)</b>							<b>8.250,88</b>			
<b>PESO TOTAL (kg)</b>							<b>24.766,09</b>			

05			
04			
03			
02			
01			
Nº	DESCRIÇÃO	RESP.	DATA

**REVISÃO**



**GOVERNO DO ESTADO DO ESPÍRITO SANTO**  
SECRETARIA DE ESTADO DE EDUCAÇÃO - SEDU



**SEDU** GERÊNCIA DE REDE FÍSICA ESCOLAR

**TÍTULO: EEFM GRAÇA ARANHA SUBSTITUIÇÃO DA COBERTURA BLOCOS 03 E 04**

ENDEREÇO: RUA HERMANN ROELKE, Nº 131, CENTRO, SANTA MARIA DE JETIBÁ - ES

FRANCHA: <b>ESTRUTURA METÁLICA</b>	PROJETO:
SUBSECRETARIO ESCOLAR: <b>AURELIO MENEGUELLI RIBEIRO</b>	ESTRUTURAL
GERENTE DA GERF: _____	ESCALA: _____
COORDENADOR GERAL EPC: <b>MARCELO AMORIM GONCALVES</b>	UNIDADE: _____
AUTOR PROJETO: <b>EDSON DE OLIVEIRA PIRES</b>	CREA: _____
CO-AUTOR PROJETO: <b>MOISES BRITO SOBRINHO</b>	CREA: _____
RESPONSÁVEL TÉCNICO: _____	RESPONSÁVEL TÉCNICO: _____
ARQUIVO: <b>L02SMJ04-01-EM.dwg</b>	DESENHO: _____

**VISTA PORTICOS SUBJECÇÃO TELHADO E DETALHES**

PROJETO: \_\_\_\_\_ OBSERVAÇÕES: \_\_\_\_\_ DATA: \_\_\_\_\_ VISTO: \_\_\_\_\_ REVISÃO: \_\_\_\_\_

**02**  
**03**