

CERTIFICADO DE CONTROLE DA QUALIDADE DO CIMENTO

TIPO/CLASSE:

CPII-F 32 RS

FÁBRICA:

FBA - FÁBRICA DE BARAUNAS - RN

MÊS/ANO:

MAIO/2026

FL-AGLO-LAB-002_R03

ENSAIOS QUÍMICOS				ENSAIOS FÍSICOS E MECÂNICOS									
ENSAIO	PERDA AO FOGO (PF)	RESÍDUO INSOLÚVEL (RI)	TRIÓXIDO DE ENXOFRE (SO3)	RESISTÊNCIA A COMPRESSÃO			FINURA			EXPANSIB. A QUENTE	TEMPO DE PEGA		CONSIST. NORMAL
				3 DIAS	7 DIAS	28 DIAS	BLAINE	#325	#200		INÍCIO	FIM	
UNIDADE	(%)	(%)	(%)	(MPa)	(MPa)	(MPa)	(cm ² /g)	(%)	(%)	(mm)	(min)	(min)	(%)
LIMITE NORMATIVO (ABNT NBR 16697:2018)	≤ 12,5	≤ 7,5	≤ 4,5	≥ 10,0	≥ 20,0	≥ 32,0	-	-	≤ 12,0	≤ 5	≥ 60	≤ 600	-
01/05/2026	12,30	2,10	3,42	19,0	28,0	38,0	5314	5,0	0,3	1,0	160	210	26,1
02/05/2026	12,00	2,22	3,50	19,0	28,0	38,0	5300	4,9	0,3	1,0	160	210	26,1
03/05/2026	12,20	2,23	3,45	19,0	28,0	38,0	5280	5,0	0,3	1,0	160	210	26,1
04/05/2026	12,22	2,20	3,52	19,0	28,0	38,0	5360	4,9	0,3	1,0	160	210	26,1
05/05/2026	11,05	2,17	3,55	19,0	28,5	38,0	5080	4,8	0,3	1,0	160	210	26,1
06/05/2026	11,40	2,10	3,51	18,0	28,5	38,0	4915	5,4	0,3	1,0	160	210	26,1
07/05/2026	11,70	2,05	3,57	18,5	28,5	38,0	4870	5,2	0,3	1,0	160	210	26,1
08/05/2026	12,33	1,10	3,49	18,5	28,0	36,0	5140	5,3	0,3	1,0	160	210	26,1
09/05/2026	12,30	2,40	3,49	18,5	28,0	36,0	5043	4,8	0,3	1,0	160	210	26,1
10/05/2026	12,48	2,40	3,46	18,5	28,0	36,0	5074	4,8	0,3	1,0	160	210	26,1
11/05/2026	12,50	2,10	3,44	18,0	27,0	36,0	5190	4,2	0,3	1,0	160	210	26,1
12/05/2026	12,50	2,10	3,48	18,0	26,0	36,5	5090	5,2	0,3	1,0	160	210	26,1
13/05/2026	12,50	2,70	3,39	18,0	26,0	36,5	5240	5,3	0,3	1,0	160	210	26,1
14/05/2026	12,20	2,75	3,43	18,5	26,0	36,5	4990	5,0	0,3	1,0	160	210	26,1
15/05/2026	12,12	2,75	3,56	19,0	26,0	37,0	4960	4,7	0,3	1,0	160	210	26,1
16/05/2026	12,40	2,70	3,42	19,0	26,0	37,0	5000	4,9	0,3	1,0	160	210	26,1
17/05/2026	12,40	2,70	3,30	19,0	26,0	37,0	4960	4,8	0,3	1,0	160	210	26,1
18/05/2026	12,50	2,66	3,56	19,0	26,0	37,0	4920	5,2	0,3	1,0	160	210	26,1
19/05/2026	10,61	2,60	3,42	19,0	26,0	37,0	4790	4,7	0,3	1,0	160	210	26,1
20/05/2026	11,98	2,60	3,30	19,0	26,0	37,0	4919	4,3	0,3	1,0	160	210	26,1
21/05/2026	12,49	2,60	3,30	19,0	26,0	37,0	4910	4,7	0,3	1,0	160	210	26,1
22/05/2026	11,86	2,40	3,13	20,0	26,0	34,0	5100	4,8	0,3	1,0	160	210	26,1
23/05/2026	11,78	2,43	3,37	20,0	26,0	34,0	4820	4,4	0,3	1,0	160	210	26,1
24/05/2026	12,50	2,45	3,36	20,0	26,0	34,0	4870	4,7	0,3	1,0	160	210	26,1
25/05/2026	11,16	2,45	3,60	18,0	26,0	34,0	5300	4,9	0,3	1,0	160	210	26,1
26/05/2026	12,49	2,30	3,64	18,5	26,0	34,0	5040	4,8	0,3	1,0	160	210	26,1
27/05/2026	12,50	2,30	3,53	18,5	26,0	34,0	5020	4,8	0,3	1,0	160	210	26,1
28/05/2026	12,50	2,30	3,72	18,5	26,0	34,0	5145	5,3	0,3	1,0	160	210	26,1
29/05/2026	9,80	2,30	4,00	18,5	26,0	34,0	4720	4,5	0,5	1,0	170	205	27,0
30/05/2026	12,50	2,30	4,10	18,5	26,0	34,0	5030	4,9	0,5	1,0	170	205	27,0
31/05/2026	12,50	2,30	4,10	18,5	26,0	34,0	5130	5,0	0,5	1,0	170	205	27,0
MÉDIA	12,06	2,35	3,52	18,8	26,7	36,1	5049	4,9	0,3	1,0	161	210	26,2
DESVIO PADRÃO	0,65	0,32	0,22	0,55	1,02	1,59	165,16	0,29	0,06	0,00	3,01	1,50	0,27
MÍNIMO	9,80	1,10	3,13	18,0	26,0	34,0	4720	4,2	0,3	1,0	160	205	26,1
MÁXIMO	12,50	2,75	4,10	20,0	28,5	38,0	5360	5,4	0,5	1,0	170	210	27,0



Responsável Técnico

YURI GALILLEU SILVA COSTA

CRQ: 153000720 - XV Região

CERTIFICADO DE CONTROLE DA QUALIDADE DO CIMENTO

TIPO/CLASSE:

CPII-F 32 RS

FÁBRICA:

FBA - FÁBRICA DE BARAUNAS - RN

MÊS/ANO:

JUNHO/2026

FL-AGLO-LAB-002_R03

ENSAIOS QUÍMICOS				ENSAIOS FÍSICOS E MECÂNICOS									
ENSAIO	PERDA AO FOGO (PF)	RESÍDUO INSOLÚVEL (RI)	TRIÓXIDO DE ENXOFRE (SO3)	RESISTÊNCIA A COMPRESSÃO			FINURA			EXPANSIB. A QUENTE	TEMPO DE PEGA		CONSIST. NORMAL
				3 DIAS	7 DIAS	28 DIAS	BLAINE	#325	#200		INÍCIO	FIM	
UNIDADE	(%)	(%)	(%)	(MPa)	(MPa)	(MPa)	(cm²/g)	(%)	(%)	(mm)	(min)	(min)	(%)
LIMITE NORMATIVO (ABNT NBR 16697:2018)	≤ 12,5	≤ 7,5	≤ 4,5	≥ 10,0	≥ 20,0	≥ 32,0	-	-	≤12,0	≤ 5	≥ 60	≤ 600	-
01/06/2026	11,46	2,40	4,49	18,0	27,0	34,0	5090	4,8	0,5	1,0	170	205	27,0
02/06/2026	12,41	2,40	3,09	18,0	27,0	34,5	5030	5,3	0,5	1,0	170	205	27,0
03/06/2026	12,10	2,40	3,47	19,0	27,0	34,0	5480	4,7	0,5	1,0	170	205	27,0
04/06/2026	12,20	2,40	3,20	19,0	27,0	35,0	5360	5,9	0,5	1,0	170	205	27,0
05/06/2026	12,40	2,40	3,35	19,0	25,0	34,0	5220	5,1	0,5	1,0	170	205	27,0
06/06/2026	12,30	2,45	3,36	18,0	25,0	34,0	5180	5,5	0,5	1,0	170	205	27,0
07/06/2026	11,50	2,45	3,35	18,0	25,0	34,5	5380	5,8	0,5	1,0	170	205	27,0
08/06/2026	12,50	2,50	3,22	18,0	25,0	34,5	5399	5,8	0,5	1,0	170	205	27,0
09/06/2026	12,50	2,50	3,20	18,0	25,0	34,5	5260	5,7	0,5	1,0	170	205	27,0
10/06/2026	10,62	2,50	3,68	18,0	25,0	33,3	4880	7,0	0,5	1,0	170	205	27,0
11/06/2026	11,50	2,50	3,99	17,0	25,5	32,8	4930	7,8	0,5	1,0	170	205	27,0
12/06/2026	12,50	2,30	4,52	17,0	24,0	32,5	5154	5,9	0,5	1,0	170	190	26,0
13/06/2026	12,50	2,28	3,43	17,0	24,0	32,5	5123	5,8	0,5	1,0	170	190	26,0
14/06/2026	12,50	2,35	3,31	17,0	24,0	32,8	4974	6,3	0,5	1,0	170	190	26,0
15/06/2026	12,50	2,35	3,46	17,0	24,0	32,0	5050	6,2	0,5	1,0	170	190	26,0
16/06/2026	12,50	2,35	3,38	17,0	24,0		4970	6,5	0,5	1,0	170	190	26,0
17/06/2026	12,50	2,35	3,48	17,0	24,0		5150	6,1	0,5	1,0	170	190	26,0
18/06/2026	12,45	2,35	3,11	17,0	24,0		5180	6,2	0,5	1,0	170	190	26,0
19/06/2026	12,50	2,35	3,37	17,0	24,0		4930	6,3	0,5	1,0	170	190	26,0
20/06/2026	11,87	2,35	3,50	17,0	24,0		4980	6,5	0,5	1,0	170	190	26,0
21/06/2026	11,47	2,35	3,35	17,0	24,0		4830	6,6	0,5	1,0	170	190	26,0
22/06/2026	12,00	2,67	3,40	18,5	24,0		4830	6,6	0,5	1,0	170	190	26,0
23/06/2026	12,33	2,66	3,92	18,5	24,0		4980	5,8	0,5	1,0	170	190	26,0
24/06/2026	12,11	2,66	3,78	18,5	24,0		5030	5,1	0,5	1,0	170	190	26,0
25/06/2026	12,42	2,66	3,72	18,5	24,0		5080	4,9	0,5	1,0	170	190	26,0
26/06/2026	11,85	2,00	3,70	18,5	27,2		5165	5,3	0,5	1,0	170	190	26,0
27/06/2026	11,76	2,00	3,72	18,5	28,2		5210	4,8	0,5	1,0	170	190	26,0
28/06/2026	9,60	1,90	3,77	18,5	28,2		4860	7,7	0,5	1,0	170	190	26,0
29/06/2026	10,90	1,90	3,80	18,5	28,2		5060	5,5	0,5	1,0	170	190	26,0
30/06/2026	11,90	1,90	3,60	18,5	28,0		5050	5,1	0,5	1,0	170	190	26,0
MÉDIA	11,99	2,35	3,56	17,9	25,3	33,7	5094	5,9	0,5	1,0	170	196	26,4
DESVIO PADRÃO	0,68	0,22	0,35	0,74	1,57	0,93	170,38	0,79	0,00	0,00	0,00	7,35	0,49
MÍNIMO	9,60	1,90	3,09	17,0	24,0	32,0	4830	4,7	0,5	1,0	170	190	26,0
MÁXIMO	12,50	2,67	4,52	19,0	28,2	35,0	5480	7,8	0,5	1,0	170	205	27,0



Responsável Técnico

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MÊS/ANO:

JULHO/2026



FL-AGLO-LAB-002_R03

ENSAIOS QUÍMICOS				ENSAIOS FÍSICOS E MECÂNICOS									
ENSAIO	PERDA AO FOGO (PF)	RESÍDUO INSOLÚVEL (RI)	TRIÓXIDO DE ENXOFRE (SO3)	RESISTÊNCIA A COMPRESSÃO			FINURA			EXPANSIB. A QUENTE	TEMPO DE PEGA		CONSIST. NORMAL
				3 DIAS	7 DIAS	28 DIAS	BLAINE	#325	#200		INICIO	FIM	
UNIDADE	(%)	(%)	(%)	(MPa)	(MPa)	(MPa)	(cm²/g)	(%)	(%)	(mm)	(min)	(min)	(%)
LIMITE NORMATIVO (ABNT NBR 16697:2018)	≤ 12,5	≤ 7,5	≤ 4,5	≥ 10,0	≥ 20,0	≥ 32,0	-	-	≤12,0	≤ 5	≥ 60	≤ 600	-
01/07/2026	11,73	1,90	3,84	17,0			5160	5,1	0,5	1,0	170	190	26,0
02/07/2026	12,28	1,90	3,76	17,0			5090	5,0	0,5	1,0	170	190	26,0
03/07/2026	12,49	2,92	3,49	18,0			5050	4,8					
04/07/2026	11,14	2,92	3,81	18,0			4760	7,0					
05/07/2026	10,16	2,92	3,78	18,0			4850	7,6					
06/07/2026													
07/07/2026				17,0									
08/07/2026				17,0									
09/07/2026													
10/07/2026													
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26/07/2026													
27/07/2026													
28/07/2026													
29/07/2026													
30/07/2026													
31/07/2026													
MÉDIA	11,56	2,51	3,74	17,4	#DIV/0!	#DIV/0!	4982	5,9	0,5	1,0	170	190	26,0
DESVIO PADRÃO	0,94	0,56	0,14	0,53	#DIV/0!	#DIV/0!	169,32	1,30	0,00	0,00	0,00	0,00	0,00
MÍNIMO	10,16	1,90	3,49	17,0	0,0	0,0	4760	4,8	0,5	1,0	170	190	26,0
MÁXIMO	12,49	2,92	3,84	18,0	0,0	0,0	5160	7,6	0,5	1,0	170	190	26,0

Responsável Técnico

YURI GALILLEU SILVA COSTA

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