



CERTIFICADO DE CONTROLE DA QUALIDADE DO CIMENTO

TIPO/CLASSE: **CPIII-40 RS ENSACADO**
FÁBRICA: **FVI - FÁBRICA DE VITÓRIA - ES**
MÊS/ANO: **JULHO/2026**



ENSAIOS QUÍMICOS				ENSAIOS FÍSICOS E MECÂNICOS									
ENSAIOS	PERDA AO	RESIDUO	TRIÓXIDO DE	RESISTÊNCIA À COMPRESSÃO			FINURA			EXPANSIB.	TEMPO DE PEGA		CONSIST. NORMAL
	FOGO (PF)	INSOLÚVEL (RI)	ENXÓFRE (SO3)	3 DIAS	7 DIAS	28 DIAS	BLAINE	#325	#200	A QUENTE	INÍCIO	FIM	
UNIDADE	(%)	(%)	(%)	(MPa)	(MPa)	(MPa)	(cm²/g)	(%)	(%)	(mm)	(min)	(min)	(%)
LIMITE NORMATIVO (ABNT NBR 16697:2018)	≤ 6,5	≤ 5,0	≤ 4,5	≥ 12,0	≥ 23,0	≥ 40,0	–	–	≤ 8,0	≤ 5	≥ 60	≤ 720	–
01/07/2026	0.67		1.12	18.2	27.6	41.0	4733	1.2	0.3	0.0	240	305	32.3
02/07/2026	0.53		1.16	16.3	28.1	41.0	4713	1.1	0.3	0.0	230	295	32.1
03/07/2026	0.69		1.25	17.3	28.7	40.1	4728	1.0	0.2	0.0	225	295	32.3
04/07/2026	1.06		1.10	17.7	27.9	41.6	4682	1.2	0.2	0.0	225	290	32.2
06/07/2026	0.89		1.10	17.9	27.0		4654	1.2	0.2	0.0	230	290	32.1
07/07/2026	1.04		1.07	17.8	26.4		4583	1.3	0.2	0.0	225	290	32.0
08/07/2026	0.78		1.12	17.6		41.1	4750	1.2	0.2	0.0	225	285	31.9
09/07/2026	0.71		1.10	17.8	27.8		4675	1.2	0.3	0.0	230	305	31.9
10/07/2026	1.08		1.32	16.4	26.0	40.1	4642	1.4	0.2	0.0	225	290	32.0
11/07/2026	1.15		1.16	15.4	25.1		4585	1.4	0.2	0.0	220	285	32.3
13/07/2026	1.08		1.14	16.7	26.2	41.7	4680	1.4	0.2	0.0	225	289	32.2
14/07/2026	1.28		1.26	15.2	27.2		4747	1.2	0.3	0.0	225	290	32.2
15/07/2026	1.15		1.33	15.7	27.3		4743	1.3	0.2	0.0	225	292	32.3
16/07/2026	0.90		1.25	16.4	26.8	40.9	4799	1.2	0.2	0.0	220	285	32.3
17/07/2026	0.84		1.21	19.7	30.0	42.8	4673	1.3	0.2	0.0	235	300	32.4
20/07/2026	0.99		1.17	19.6	29.6	42.6	4712	1.3	0.2	0.0	215	280	32.5
21/07/2026	0.99		1.10	19.6	29.9	45.6	4709	1.4	0.2	0.0	225	275	32.4
22/07/2026	0.99		1.20	19.5	28.7	43.7	4627	1.6	0.1	0.0	220	285	32.3
23/07/2026	0.87		1.26	18.7	28.1	44.5	4525	1.5	0.2	0.0	205	265	32.2
24/07/2026	0.86		0.92	18.5	28.2	41.5	4615	1.5	0.2	0.0	225	280	32.3
25/07/2026	1.10		1.01	19.8	28.1	44.4	4756	1.5	0.2	0.0	225	285	32.3
27/07/2026	1.52		0.87	17.9	28.4	42.1	4710	1.3	0.2	0.0	215	270	32.3
28/07/2026	1.34		1.16	19.5	28.8	44.6	4629	1.5	0.2	0.0	220	275	32.0
29/07/2026	1.10		1.14	16.9	28.5	44.8	4564	1.3	0.3	0.0	225	280	32.1
30/07/2026	0.93		1.03	17.5	28.5	44.1	4576	1.6	0.2	0.0	235	305	32.2
31/07/2026	0.55		1.22	16.9	28.6	42.3	4610	1.5	0.2	0.0	230	290	32.1
MÉDIA	0.97		1.15	17.7	27.9	42.5	4670	1.3	0.2	0.0	225	288	32.2
DESVIO PADRÃO	0.23		0.11	1.4	1.2	1.7	70	0.2	0.1	0.0	7	10	0.2
MÍNIMO	0.53		0.87	15.2	25.1	40.1	4525	1.0	0.1	0.0	205	265	31.9
MÁXIMO	1.52		1.33	19.8	30.0	45.6	4799	1.6	0.3	0.0	240	305	32.5

Kênia gomes Aires

Responsável Técnico

KÊNIA GOMES AIRES

CRQ: 21.3.00318 - V Região



CERTIFICADO DE CONTROLE DA QUALIDADE DO CIMENTO

TIPO/CLASSE: **CPIII-40 RS ENSACADO**
FÁBRICA: **FVI - FÁBRICA DE VITÓRIA - ES**
MÊS/ANO: **AGOSTO/2026**



ENSAIOS QUÍMICOS				ENSAIOS FÍSICOS E MECÂNICOS									
ENSAIOS	PERDA AO	RESIDUO	TRIÓXIDO DE	RESISTÊNCIA À COMPRESSÃO			FINURA			EXPANSIB.	TEMPO DE PEGA		CONSIST.
	FOGO (PF)	INSOLÚVEL (RI)	ENXÓFRE (SO3)	3 DIAS	7 DIAS	28 DIAS	BLAINE	#325	#200	A QUENTE	INÍCIO	FIM	
UNIDADE	(%)	(%)	(%)	(MPa)	(MPa)	(MPa)	(cm²/g)	(%)	(%)	(mm)	(min)	(min)	(%)
LIMITE NORMATIVO (ABNT NBR 16697:2018)	≤ 6,5	≤ 5,0	≤ 4,5	≥ 12,0	≥ 23,0	≥ 40,0	–	–	≤ 8,0	≤ 5	≥ 60	≤ 720	–
01/08/2026	0.28	0.67	1.20	17.3	28.1	42.0	4759	1.4	0.2	0.0	235	300	32.1
03/08/2026	1.14		1.18	18.3	29.7		4760	1.2	0.2	0.0	220	275	32.1
04/08/2026	1.23	0.69	1.27	18.8		43.6	4631	1.6	0.2	0.0	220	290	32.1
05/08/2026	1.20	0.52	1.10	18.4	29.6	44.8	4627	1.3	0.2	0.0	220	270	31.9
06/08/2026	0.62	0.53	1.02	18.9	28.4	42.8	4701	1.5	0.2	0.0	225	285	31.8
07/08/2026	0.69	0.57	1.25	18.7		42.1	4702	1.4	0.2	0.0	215	275	31.9
08/08/2026	1.22	0.51	1.20	17.5	28.4	44.5	4603	1.6	0.2	0.0	215	270	31.9
10/08/2026	0.94	0.71	1.14	16.4	27.7	44.1	4582	1.5	0.3	0.0	220	270	31.8
11/08/2026	1.10	0.49	1.16	17.8	28.9	45.1	4660	1.0	0.2	0.0	225	275	32.0
12/08/2026	1.10	0.60	1.20	16.9	29.7		4728	1.3	0.3	0.0	235	295	32.0
13/08/2026	1.32	0.49	0.81	15.7	27.5	44.0	4544	1.3	0.1	0.0	215	280	32.3
14/08/2026	0.81	0.68	0.65	16.8	28.1	44.8	4724	1.7	0.1	0.0	240	305	32.1
15/08/2026	0.83		0.68	16.3	28.1	44.1	4677	1.4	0.3	0.0	225	285	32.0
17/08/2026	1.07		0.68	17.8	29.0	45.4	4594	1.8	0.4	0.0	235	300	32.0
18/08/2026	0.93		0.71	16.9	30.3	45.5	4652	1.7	0.2	0.0	225	290	31.9
19/08/2026	0.83		0.78	16.0	27.9	44.8	4656	1.1	0.2	0.0	225	290	31.0
20/08/2026	1.07		0.69	19.9	31.9		4595	1.7	0.3	0.0	225	290	31.7
21/08/2026	1.39		0.81	17.5	30.2		4668	1.5	0.3	0.0	225	290	31.8
22/08/2026	1.49		0.85	19.6	31.1	44.6	4546	1.5	0.3	0.0	210	275	31.7
24/08/2026	1.21		0.86	16.6	28.5	44.4	4704	1.7	0.3	0.0	210	270	31.8
25/08/2026	1.34		0.76	19.5	29.1	45.6	4704	1.7	0.3	0.0	210	270	31.9
26/08/2026	1.23		0.84	19.5	28.5	44.3	4661	1.7	0.2	0.0	210	270	31.9
27/08/2026	1.30		0.73	19.8	28.2	44.9	4686	1.5	0.2	0.0	225	290	31.9
28/08/2026	0.88		0.88	20.0	29.8	45.4	4597	1.5	0.3	0.0	200	260	31.8
30/08/2026	1.07		0.97	18.0	27.5		4625	1.7	0.3	0.0	210	275	31.5
31/08/2026	1.00		0.85	16.9	27.9		4569	1.1	0.2	0.0	225	275	31.3
MÉDIA	1.05	0.59	0.93	17.9	28.9	44.3	4652	1.5	0.2	0.0	221	282	31.9
DESVIO PADRÃO	0.27	0.09	0.21	1.3	1.2	1.0	62	0.2	0.1	0.0	9	12	0.3
MÍNIMO	0.28	0.49	0.65	15.7	27.5	42.0	4544	1.0	0.1	0.0	200	260	31.0
MÁXIMO	1.49	0.71	1.27	20.0	31.9	45.6	4760	1.8	0.4	0.0	240	305	32.3

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Responsável Técnico

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CERTIFICADO DE CONTROLE DA QUALIDADE DO CIMENTO

TIPO/CLASSE: CPM-40 RS ENSACADO
FÁBRICA: FVI - FÁBRICA DE VITÓRIA - ES
MÊS/ANO: SETEMBRO/2026



ENSAIOS QUÍMICOS				ENSAIOS FÍSICOS E MECÂNICOS									
ENSAIOS	PERDA AO	RESIDUO	TRÍOXIDO DE	RESISTÊNCIA À COMPRESSÃO			FINURA			EXPANSIB.	TEMPO DE PEGA		CONSIST.
	FOGO	INSOLÚVEL	ENXÓFRE	3 DIAS	7 DIAS	28 DIAS	BLAINE	#325	#200	A QUENTE	INÍCIO	FIM	
UNIDADE	(%)	(%)	(%)	(MPa)	(MPa)	(MPa)	(cm²/g)	(%)	(%)	(mm)	(min)	(min)	(%)
LIMITE NORMATIVO (ABNT NBR 16697:2018)	≤ 6,5	≤ 5,0	≤ 4,5	≥ 12,0	≥ 23,0	≥ 40,0	–	–	≤ 8,0	≤ 5	≥ 60	≤ 720	–
01/09/2026	0.96		0.98	16.1	27.0		4646	1.3	0.2	0.0	225	285	31.2
03/09/2026	0.87		1.08	16.4	28.0		4590	1.7	0.3	0.0	215	280	31.4
04/09/2026	1.18		0.99	17.6	28.1		4698	1.5	0.3	0.0	225	290	31.5
06/09/2026	0.98		1.02	17.7	28.2		4927	1.5	0.3	0.0	220	285	31.5
08/09/2026	1.16		0.97	16.3	27.8		4727	1.7	0.4	0.0	210	275	31.5
09/09/2026	0.73		1.20	16.0	27.7		4677	1.5	0.2	0.0	215	280	31.5
10/09/2026	1.01		1.38	17.0	27.3		4710	1.4	0.2	0.0	235	295	31.6
14/09/2026	1.13		0.70	17.3	27.8		4636	2.4	0.9	0.0	230	310	31.4
15/09/2026	1.14		0.72	17.0	27.7		4597	1.4	0.3	0.0	210	270	31.7
16/09/2026	0.93		0.74	16.5	26.6		4710	1.5	0.3	0.0	225	295	31.7
17/09/2026	1.12		0.83	15.6	27.9		4641	1.6	0.2	0.0	230	295	31.7
18/09/2026	1.11		0.62	17.2	26.8		4613	1.5	0.2	0.0	235	300	31.6
19/09/2026	1.27		0.67	17.6	26.9		4643	1.6	0.2	0.0	225	295	31.4
21/09/2026	1.12		0.71				4593	1.6	0.3	0.0	225	290	32.0
22/09/2026	1.27		0.60	16.6			4629	1.6	0.2	0.0	220	275	31.7
23/09/2026	0.81		0.88	15.5			4895	1.5	0.2	0.0	230	295	31.6
24/09/2026	1.25		2.35	16.8			4808	1.6	0.2	0.0	235	300	31.6
25/09/2026	1.27		0.92				4725	1.4	0.2	0.0	240	305	32.2
26/09/2026	1.30		0.59				4685	1.3	0.2	0.0	235	300	32.2
MÉDIA	1.08		0.94	16.7	27.5		4692	1.6	0.3	0.0	226	291	31.6
DESVIO PADRÃO	0.17		0.40	0.7	0.5		95	0.2	0.2	0.0	9	11	0.3
MÍNIMO	0.73		0.59	15.5	26.6		4590	1.3	0.2	0.0	210	270	31.2
MÁXIMO	1.30		2.35	17.7	28.2		4927	2.4	0.9	0.0	240	310	32.2

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