

FILE NAME: Kaiser Cement (KCEM)

DATE: 1973

DOC#: KCEM011

DOCUMENT DESCRIPTION: Formula for Product made in Seattle,
Antioch

CRYSTALL ACCESSORY PRODUCTS		FINISHING COMPOUND (POLYMERIC BASE)		BULLETIN NO: J 203	
				DATE: 3/28/73	
				PAGE: 1 of 2	
APPROVALS: <i>[Signature]</i>		PRODUCING PLANT SEATTLE		CANCELS: J 6137	
				DATE: 5/20/70	
BULLETIN	DESCRIPTION	¢	POUNDS	GALLONS	
220	Whiting	68.63	1400		
251	Wien, WMS P80K	9.80	200		
260	Sericite, Marvon	14.70	300		
045	Asbestos 7RF 10	3.68	75		
166	Hammco 277 Gum	1.23	25		
330	Polyvinyl Alcohol	1.23	25		
245	Thickener	.24	5		
453	Preservative	.10	2		
454	Nopeco PD 1	.15	3		
164	Glyoxal 80%	.24	5		
	TOTAL	100.00	2040		

MANUFACTURING INSTRUCTIONS:

1. See Process Bulletin No. J 203.
2. Mixing time shall be 8 minutes minimum and 12 minutes maximum.

QUALITY CONTROL:

TM-1	Viscosity, 150 gm cylinder @ 5 sec 200 gm to 150 cc water.	38 - 40 mm
TM-3A	Pond...	6 - 7
TM-6	Application	Equal to Standard
TM-7	Workability	Equal to Standard
TM-35	0.25% Phoric Acid Test	No firm gel after 1 min.

INITIAL RECOMMENDATION
PRODUCTS

COMPOUND

DATE: 3/26/72

PAGE: 1 of 3

APPROVALS:

PRODUCING PLANT
Antioch

CANCELS:

P-40

DATE: 9/1/68

BULLETIN	DESCRIPTION	lb	POUNDS	CALL
076	Calcined Gypsum	25.74	500	
251	Mica, PEOF	7.72	150	
230	Polyvinyl Alcohol	.76	15	
045	Asbestos 7RF 10	3.35	65	
325	Polyvinyl Acetate, D702	4.12	80	
245	Thickener	.76	7	
430	Sodium Tripolyphosphate (STPP)	.05	1.0	
452	Preservative	.08	2.5	
320	Dibutyl Phthalate (Dry liquid concentrate)	.38	7.5	
332	Potassium Sulfate, K ₂ SO ₄ , (98% - 100 mesh)	.76	10 - 15	
417	Sodium Citrate (92% - 100 mesh)	.05	1.0	
220	Whiting	25.74	500	
106	Calc Cal 50	5.15	100	
076	Calcined Gypsum	25.74	500	
TOTAL BATCH WEIGHT		100.00	1043 lbs.	

MANUFACTURING INSTRUCTIONS:

1. A thorough clean-out with whiting must be made before and after each production run.
2. Wall Texture or Joint Compounds are to be run immediately after a run of this product.
3. Mixing time shall be 8 minutes minimum and 12 minutes maximum.
4. Special orders of SLOW SET One Day Joint Compound can be made by reducing the amount of potassium sulfate (Bulletin No. 332) from 10 - 15 pounds to 2.5 to 5.0 pounds per batch.

ORIGINAL ACCESSORY
PRODUCTS

COMPOUND
(POLYMERIC BASE)

DATE: 2/22/73

PAGE: 1 of 2

APPROVALS: *[Signature]*

PRODUCING PLANT
DELANCO

CANCELS:

DATE: 12/22/71

BULLETIN	DESCRIPTION	%	POUNDS	CAL
220	Whiting	60.95	1250	
251	MCC Mica	12.20	250	
260	Sericite (Warvon)	12.20	250	
045	Asbestos WRF 10	4.83	100	
186	Hydrite Flat D Clay	4.83	100	
166	Hamaco 277	2.44	50	
330	Polyvinyl Alcohol	1.47	30	
214	Thickener	.48	10	
453	Preservative	.07	1.5	
164	Glyoxal	.24	5.0	
454	Hopco-PD1	.15	3.0	
	TOTAL	100.00	2049.5	

MANUFACTURING INSTRUCTIONS:

1. See Process Bulletin J 308.
2. Mixing time shall be 8 minutes minimum and 12 minutes maximum.

QUALITY CONTROL:

TM-1	Viscosity, Brookfield 200 gm to 140 cc water	160,000 - 190,000 cp
TM-3	Bond	9 - 10
TM-6	Application	Equal to Standard
TM-7	Workability	Equal to Standard
TM-35	0.25% Boric Acid Test	No firm gel after 1 min

KIMBLE ACQUINITY PRODUCTS		PLANT & EQUIPMENT REPAIRS EQUAL PURPOSE	BULLETIN NO: J 205 DATE: 2/1/72 PAGE: 1 of 2	
APPROVALS: <i>[Signature]</i>		PROCESSING PLANT JACKSONVILLE	CANCELS: J 6005 DATE: 9/29/71	
BULLETIN	DESCRIPTION	LB	POUNDS	TOTAL
220	Whiting	39.72	2550	
256	Vien 1203	7.79	500	
261	Mica, Harvon CEF 2	6.23	400	
050	Asbestos 7 TF 1	3.89	250	
456	Troysan GMP 10GEP	.09	6	
245	Methocel 220	.31	24	
200	Keltane	.16	10	
	Water (starting)	25.99	1650	200
470	IWA Emulsion	6.92	444	40
078	Orbital Solvent	.47	30	3
	Water (adjust to standard viscosity)	8.43	540	60
	TOTAL	100.00	6414	

MANUFACTURING INSTRUCTIONS:

1. See Process Bulletin J 205.
2. For LMC, add 4 lbs yellow oxide code.

QUALITY CONTROL:

TM-1A	Viscosity, Brookfield	340,000 to 700,000 cP
TM-3	Tape Bond	9 - 12
TM-31	Standard Test Viscosity, Brookfield	100,000 - 200,000 cP

PRODUCT BULLETIN
PREMIX ACCESSORY
PRODUCTS

PREMIX DIPPING
COMPOUND

BULLETIN NO: J-0019
DATE: 11-20-74
GE: 1 of 2

APPROVALS:

GRK

PRODUCING PLANT:
JACKSONVILLE

CANCELS: J-0009
DATE: 5-16-73

BULLETIN RM-J	DESCRIPTION	\$	POUNDS	GALLONS
221	Whiting	61.60	1000	
047	Amberstone CG 210	.22	50	
442	Talc, Nital 200	1.34	100	
036	Celite 434	1.34	100	
245	Thickener W/C 22E	.25	16	
200	Water	.08	5	
380	FW Alcohol	.16	10	
433	FW 10 SEP	.26	4	
470	DMA Emulsion 4.40% on solids	5.11	332	16
	Water	26.00	1750	875
284	Glate Acid	.37	24	
450	Triethanolamine	1.10	12	
267	Odorless Mineral Spirits	1.23	80	17.5
101	Red Oxide Color		0.25	1.25
	TOTAL	100.00	6493.20	

MANUFACTURING INSTRUCTIONS:

1. See Process Bulletin J-2.
2. Add Red Oxide color to the water and mix for one minute before addition of other items (RM J-101). Two ounces Red Oxide color per batch.
3. Filling: 4 gal. 42# gross; 5 gal. pails: .69# gross.

QUALITY CONTROL:

TM-1	Viscosity, 150 gm cylinder @ 5 sec.	14 to 16 tm
TM-6	Application	Equal to Standard
TM-7	Workability	Equal to Standard

PRODUCT BULLETIN INITIAL ACCESSORY PRODUCTS		COVER-TEX WALL TEXTURE	BULLETIN NO: J-5305 DATE: 11-20-74 PAGE: 1 of 2		
APPROVALS: <i>[Signature]</i>		PRODUCING PLANT: JACKSONVILLE	CANCELS: J-5305 DATE: 12-5-69		
BULLETIN RM-J	DESCRIPTION	%	POUNDS	GALLS	
220	Whiting	66.43	1320		
442	Talc (Nytal 220)	19.68	400		
045	Asbestos 7RF10	4.92	100		
446	Titanium Pigment	2.46	50		
056	Clay Wvopel	1.23	25		
436	Starch	2.46	50		
084	Casein	1.23	25		
102	Diammonium Phosphate	0.10	2		
022	Ammonium Bihorate	0.10	2		
456	BMA-10-SEP	0.15	1		
454	Nonco PD-1	0.15	1		
200	Keltose	0.30	6		
245	Methocel 228	0.30	6		
164	Glyoxal 80%	0.40	10		
	TOTAL	100.00	2032		

MANUFACTURING INSTRUCTIONS:

Mixing time shall be 8 minutes minimum and 12 minutes maximum.

QUALITY CONTROL:

TM-1	Viscosity, Brookfield spindle "A" @ 5 RPM, 200 gm/200 cc water	30,000-35,000 CP
TM-3A	Bond	Equal to Standard
TM-34	Hardness	Equal to Standard

PRODUCTS		CERTIFY FEATURE		DATE:	J/20/74
APPROVALS: <i>[Signature]</i>		PRODUCING PLANT ANTIOCH		PAGE:	1 of 2
				CANCELS:	J-55C6
				DATE:	5/16/73
BULLETIN	DESCRIPTION	%	POUNDS	GAL	
442	Talc. Westal 202	31.18	300		
221	Limestone	31.18	300		
446	Titanium Pigment	2.60	25		
056	Wyol Bentonite	2.60	25		
035	Asbestos 3Z	1.30	12.5		
065	Bone Glue	.52	5		
084	Casein	1.04	10		
025	Amm. Oxalate	.21	2.0		
026	Amm. Pentaborate	.26	2.5		
506	Zinc Oxide	.05	0.5		
186	Hydrated Lime	.05	0.5		
245	Methocel 228	.31	3.0		
074	Burnt Umber	---	(1 oz.)		
282	Perceel Kasma	---	(1 oz.)		
322	Styrene Aggregate	2.60	25	50	
167	Hydrite MP Clay	15.50	150		
441	Supacal 50 Clay	10.40	100		
453	Preservative	.10	1.0		
TOTAL		100.00	962		

MANUFACTURING INSTRUCTIONS:

1. See Process Bulletin No. J-4, except as noted below:
 - a. Use a Broughton, paddle type mixer, with no Entoleter after blending.
 - b. Charge all items except Styrene aggregate into the mixer. Mix for eight (8) minutes after the Sweco screen has cleared.
 - c. With mixer running, add the styrene aggregate. Continue mixing for a minimum of three (3) minutes after completing addition of aggregate.
2. Package 32 pounds minimum per bag.

QUALITY CONTROL:

TM-1B - Viscosity, cc per 100 gm to give 5 - 5-1/2" diameter
 TM-3A - Bond

110 to 190 cc
 Equal to Stand.

PERMANENTE CEMENT COMPANY

PLANT: Permanente

Product Specification

No. PL-G-

Standard Product: Plastic Gun Cement

Effective Date: 1 August, 1966

Special Product: _____

Supercodes No. PL-G-2

FORMULATION(1)	Acceptance Limits (2)		Control Values		
	Minimum	Maximum	Minimum	Standard	Maximum
3.0% Lincoln Clay					
0.1% R.D.A.					
0.1% Airlon					
3.0 to 5.0% Asbestos Fiber					
3.75% Gypsum					
11.0% Approximate					
Remainder Type I, II, IIIA, V clinker					
SO ₃ , %	1.20	2.50	1.55	1.75	1.90
Loss on Ignition, %		1.0		1.80	2.10
PHYSICAL REQUIREMENTS					
Fineness, sq.cm./g.				(4500)(3)	
Soundness, exp., %		0.70			
Time of Setting, Gillmore					
Initial, hrs. & min.	1:15				
Final, hrs. & min.		9:00			
Air Content, % by vol.	23.0	31.0	25.0	28.0	30.0
Compressive Strength, psi.					
1 Day	550		600	800	1000
Percent plus 48 mesh	1.3	4.0	1.5	2.0	3.0

NOTES: (1) 0.25% CaCl₂ may be added in winter months.

(2) All limits set by PCC.

(3) Typical only (with asbestos).

Originated By:

Approved By:

Authorized By:

Process Engr. Dept.

8/8/63

Date

Tech. Director

8/9/63

Date

Vice President in Charge

of Operations

Reason: L.O.I. increase due

to combined water in asbestos

8/9/63

Date

Date: 8/13/63

Form 665 (11/62)

PERNENTE CEMENT COMPANY

PLANT: Permanente

Product Specification

No. Pl.

Standard Product: Plastic and Plasti-Spred Cement

Effective Date: 1 August, 1963

Special Product: _____

Supersceden No. Pl.-3

	Acceptance Limits (2)		Control Values		
	Minimum	Maximum	Minimum	Standard	Max
<u>FORMULATION(1)</u>					
3.0% Lincoln Clay					
0.1% R.D.A.					
0.1% Airalon					
3.0 to 5.0% Asbestos Fines					
3.75% Gypsum					
11.0% Approximate					
Remainder Type I, II, IIIA, V clinker					
SO ₃ , %	1.20	2.50	1.55	1.75	1.9
Loss on Ign., %		3.0		1.80	2.1
<u>PHYSICAL REQUIREMENTS</u>					
Fineness, sq.cm./g.				(4400)(3)	
Soundness; exp., %		0.70			
Time of Setting, Gillmore					
Initial, hrs. & min.	1:15				
Final, hrs. & min.		9:00			
Air Content, % by vol.	23.0	31.0	25.0	28.0	30.0
Compressive Strength, psi.					
1 Day	650		700	850	1000

NOTES: (1) 0.25% CaCl₂ may be added in winter months.

(2) All limits set by PCC.

(3) Typical only.

Originated By: _____

Approved By: _____

Authorized By: _____

Process Eng. Dept.

8/8/63

Date: Tech. Director

8/9/63

Date: Vice President in Charge

of Operations

Reason: L.O.I. increase due

to combined water in asbestos. Mfr., Proc. Engr.

8/9/63

Date: 8/23/63

Form 665 (11/62)

BOARD BULLETIN
INSULATION PRODUCTS
ST. HELENS, OREGON

MINERAL
FIBERBOARD
UL FIRE RATED

BULLETIN NO: B-10
DATE: 6/1/77
PAGE: 1 of 1

APPROVALS
1/10/77 1/11/77 1/12/77

CANCELLED: B-10
DATE: 6/22/77

	Tile and Lay-In	
	1/2"	5/8"
Mineral Wool, %	59.7	59.7
Sterling Clay, %	11.5	11.5
Asbestos, %	1.6	1.6
Sawdust Fiber, %	1.1	1.1
Starch (BD), %	8.5	8.5
Paracol 1276 (Solid), %	1.0	1.0
Repulped Broke & Planer Dust, %	16.6	16.6
Gendriv 162, %	0.15	0.15
Standard Machine Speed, FPM	21	19
Density, Planed, Lbs/Cu. Ft., (BD)	22-23	22-23
Transverse Cross, Headrig, Lbs., Minimum	25	31
Hardness, Planed, Lbs., Minimum	33	33
Shrinkage at 1400 F., %, Maximum	3	3
Incombustibles, %, Minimum	85	85
Water Absorption, % By Volume, Maximum	5	5
Sag at 1700°F., %, Maximum	0.100	0.100
Headrig Thickness, Inches	.630-.660	.740-.77
Planed Thickness, Inches	.525-.530	.650-.67
Calender Thickness, Inches		
Individual	.490-.500	.617-.63
Tape Measure, 10 pieces	4-7/8 - 5	6-3/16 - 6-1/4
Weight, Headrig, Lbs/MSF	1210	1429
Weight, Finished, Lbs/MSF	990	1225

PRODUCT BULLETIN
GYPSUM PRODUCTS

GYPSUM WALLBOARD
1/2" NULL-A-FIRE (UL)
TYPE X

BULLETIN NO: 8-4
DATE: 10/8/64
PAGE: 1 of 2
CANCELS: 8-4
DATE: 3/9/64

PRODUCING PLANTS:

Long Beach, Antioch, Seattle, Rosario, and Jacksonville

Core Formula:
(Lbs./M sq. ft.)

ALL PLANTS (Except as noted)

Board Stucco	(S-1 and S-2)	1500 - 1700
Glass Fiber	(B-G-1)	4.7 - 5.1
Paper Fiber	(B-G-1)	0 - 10.0
Starch	(RM-B-11)	7 - 10
Perlite - Null-A-Fire (c.f./M)	(B-G-1)	0 - 5.5
Soap	(B-G-1)	0.2 - 1.5 (Long Beach, Antioch & Jacksonville 0.2 - 0.7)
Lignin	(B-G-1)	0 - 3.0
Ground Gypsum	(B-G-1)	60 maximum
Potassium Sulfate (Rosario - 2.0 maximum)	(B-G-1)	5.0 "
Rehydrated Gypsum	(B-G-1)	0 - 30
Hydrated Lime	(RM-P-3)	0 - 0.75
Retarder (Rosario only)	(B-G-1)	0 - 0.5

Note: Formula shall conform to U.L. Code No. 3543

Paper Liners - Manila and Greyback paper

OPERATING SPECIFICATIONS: (Refer to Process Bulletin B-G-2 for General Specifications.)

1. Slurry Setting Time, minutes	2 - 4
2. Wet Slurry Weight (lbs./c.f.)	77 - 85
3. Wet Compressive Strength, psi	350 - 500

PRODUCT BULLETIN
GYPSUM PRODUCTS

GYPSUM WALLBOARD
1/2" NULL-A-FIRE (UL)

BULLETIN NO: B-4
DATE: 1/22/62
PAGE: 2 of 2
CHANNELS: B-4
DATE: 10/20/60

PRODUCT SPECIFICATIONS: (Refer to Product Bulletin B-G-4 for General Specifications)

Wet Weight (lb./M sq. ft.)	3000 - 3300
Dry Weight (lb./M sq. ft.)	2120 - 2250 - Average 2175
Evaporation Loss (lb./M sq. ft.)	900 - 1100
Thickness - Average (inch)	.480 - .505
" - Individual reading (inch)	± 0.01 inch average
Edge Hardness or Take-off (lb.)	8.0 minimum
End Peel after Sawing (inch)	1/8 maximum
Flexural Strength, minimum	
Across grain (lb.)	150
Parallel "	45
Deflection or Break, minimum	
Across grain (inch)	0.25
Parallel "	0.15
Punch Test (lb.)	1100 - 1800
Twist Test, maximum split	
Face (inch)	3/4
Back "	3/4
Hammer Loss Test, decigrams	
Individual Test, maximum	5
Bond at High Humidity, maximum peel	
Face (inch)	1/2
Back "	1/2

Face printing shall read - 1/2" NULL-A-FIRE TYPE X X 3/4" NULL-A-FIRE TYPE X

*Denotes addition and change.

PRODUCT BULLETIN
GYPSUM PRODUCTS

GYPSUM WALLBOARD
5/8" NULL-A-FIRE (UL)
TYPE X

BULLETIN NO: 8-6
DATE: 4/29/
PAGE: 1 of 3
CANCELS: 8-6
DATE: 8/8/6

PRODUCING PLANTS:

LONG BEACH, ANTIOCH, SEATTLE, ROSARIO

Core Formula:
(Lbs./M sq. ft.)

ALL PLANTS (Except as noted) ANTIOCH

Board Stucco	(S-1 and S-2) (Rosario -	1900 - 2150 1960 - 2175)	1850 - 2150
Glass Fiber	(B-G-1)	6.0 - 6.5	6.0 - 6.5
Paper Fiber	(B-G-1)	0 - 12.0	None
Starch	(RM-B-11)	9.0 - 12.5	9.0 - 15.0
Perlite Null-A-Fire (c.f./M)	(B-G-1)	6.0 - 7.0	6.0 - 7.0
*Soap	(B-G-1) (Rosario -	0.3 - 1.5 0.6 - 2.0)	2.0 - 3.5
Lignin	(B-G-1)	0 - 4.0	0 - 4.0
Ground Gypsum	(B-G-1) (Rosario -	60.0 maximum None)	130.0 maximum
Rehydrated Gypsum	(B-G-1)	0 - 24	None
Potassium Sulfate	(B-G-1)	2.0 maximum	2.0 maximum
Retarder (Rosario only)	(B-G-1)	0.75 "	--
Hydrated Lime	(RM-P-3)	0 - 1.13	0 - 1.13

*Note 1. Formula shall conform to U.L. Code No. 3543.

*Note 2. At Antioch, Hercules soap is preferred. Ultrawet usage range - 0.2 - 0.6.

Paper Liners

1. Manila and greyback paper.
2. For 5/8" x 24" face board for Moveable Partitions, use following width paper:

Manila	-	27 inches
Greyback	-	23-1/4 inches

*Denotes additions and changes.