PLAINTIFF'S EXHIBIT
USG-396

OPERATING DIVISION		NO. [illegible]
PRODUCT PROCEDURE	PERF-A-TAPE JOINT COMPOUNDS (USE OF LIGHTER COLORED SER-X)	DATE 10-17-60
APPROVED: MJB	GYPSUM AND NEW BRIGHTON	PAGE 1 of 1
		CANCELS DATED NEW

The lighter-colored Ser-X from Summit Mining shall be used by Gypsum and New Brighton in all joint compound formulations, as a substitute for the presently used dark colored Ser-X as soon as the present stocks of the latter are consumed.

The two materials must not be used interchangeably, as the difference in color could cause problems in the field.

The lighter Ser-X is preferable, as it will produce whiter unpigmented Topping Compounds.

This Bulletin expires 2-1-61.

DP007 1242

PRODUCT FORMULA	ALL PURPOSE READY-MIXED PERF-A-TAPE JOINT COMPOUND	DATE 10-11-60 PAGE 1 of 1
APPROVED:	SWEETWATER	CANCELS Page 1 DATED, 8-8-60

All-Purpose Ready-Mixed Perf-A-Tape Joint Compound

A resin-emulsion base, ready-mixed Perf-A-Tape Compound.

Manufacturing Plant: Sweetwater

Filler Mix	% Non-Volatile	JE-204 Lbs. (For a 945 lb. filler charge)
Mica JC	(Formula V)	150 approx.
DXN Mineralite	30.0	300
Nicolet 7M25 Asbestos	(As Required)	35 approx.
Huber CWF Clay	10.0	100
Methocel 65HG (4000 CPS)	0.8	8
Ferrite Yellow	(To match manila color of Sheetrock face paper)	
Carbonate Filler	(To make 94.5%)	(To make 945 lbs.)

Paste Mix	% Non-Volatile	Lbs. (For approx. 130 gal. batch)
Fillers	94.5	945
Plasticized WC-130	5.5*	96
Cambitrol	-	9
AMA Preservative	-	4 oz.
Water	-	70 gals. approx.

*Consists 5.0 WC-130 solids and 0.5 Dibutyl Phthalate

Raw Materials: Same as for 61-2-24, except as follows:

DXN Mineralite	- per Bulletin 6-146-2
Nicolet 7M25 Asbestos	- per Bulletin 6-7-1
Carbonate Filler	- per Bulletin 6-24-10

Formulation: Same as for 61-2-24 except on page 2 of 2 under Procedure add the heat to filler mix. Mix the 100 gram sample of filler mix at 75 RC for 200 grams to give a Brabender reading of between 400 and 500 at 77°F.

Machine Product Run: Same as 61-2-24 except as follows:
[illegible] - Brabender reading to be 420 ± 20 after the formula has mixed for 20 hrs.

Note: To match manila color of Sheetrock face paper. The formula may be [illegible] as required when color codes are specified. Material [illegible] for [illegible] over or under the [illegible] shown.

Reference or Reference: As mentioned by Department [illegible].

This Bulletin replaces Bulletin [illegible].

GP009 1011

COMMENTS AND RECOMMENDATIONS

BY EKG DATE 9 30 60 : [illegible]

[illegible] Bulletin [illegible] attached [illegible] Bulletin [illegible] [illegible] [illegible]

OPERATING DIVISION		
[illegible] PROCEDURE	ALL PURPOSE READY-MIXED PERF-A-TAPE JOINT COMPOUND	NO. 61-2-[illegible]
		DATE [illegible]
		PAGE 1 of 1
APPROVED:	SOUTH GATE	CANCELS Page 1 DATED 10-11-60

All Purpose Ready-Mixed Perf-A-Tape Joint Compound

A resin-emulsion base, ready-mixed Perf-A-Tape Compound

Manufacturing Plant: South Gate (to manufacture up to 400 M Gallons)

Filler Mix	% Non-Volatile	JE-201 Lbs. (for 945# Filler Charge)
Mica JC	(Formula V)	150 approx.
M-350	30.0	300
Asbestos Floats	(As required)	35 approx.
Huber Clay	10.0	100
Methocel [illegible]	0.8	8
Ferrite Yellow	(To match the manila color of Sheetrock Face Paper)	
400 Whiting	(To make 94.5%)	(To make up 945 lbs.)

Paste Mix	% Non-Volatile	Lb. (for approx. 130 gal. batch)
Fillers	94.5	945
Plasticized WC-130*	5.5	96
Carbitol	-	9
PMA Preservative	-	4 oz.
Water	-	71 gal. approx.

*Contains 5.0 WC-130 solids and 0.5 Dibutyl Phthalate.

Raw Materials: Same as for 61-2-24, except as follows:

M 350 Sericite - per Bulletin 6-146-2
400 Whiting - per Bulletin 6-24-1

Processing and Finished Product Test: Same as for 61-2-[illegible] except as follows on page 2 of 3:

1. Consistency Control Test on Filler Mix. Mix the [illegible] gram sample of Filler mix at 70 cc per 100 grams to give a Brabender reading of [illegible] 50 units at [illegible]. The procedure of 61-2-22 is to be followed.

2. Viscosity - [illegible] 450-500 Brabender Units.

[illegible]: Containers and Labels as designated by Department [illegible].

[illegible] Bulletin 61-1-12.

[illegible]

OP009 0934

Operating Division PRODUCT PROCEDURE	ALL PURPOSE READY-MIXED	No. 61-2-24
Approved: 9M8B	PERF-A-TAPE JOINT COMPOUND	Date 3-2-61
		Page 1 of 4
		Cancels Page 1
		Dated 6-8-60

DESCRIPTION:
A resin-emulsion base, ready-mixed Perf-A-Tape, with a package life of one year.

MANUFACTURING MILLS: New Brighton, Gypsum

FORMULA: JE-186A

FILLER MIX	% Non Volatile	lbs.(For 945lbs. filler charge)
Mica JC	(2/3 For.V)	100 approx.
Ser-X	30.0	300
Asbestos Floats	(as required)	35 approx.
Huber Clay	10.0	100
Methocel HG	0.8	8
Ferrite Yellow	(to match the manila color of Sheetrock face paper)	
A Dolomite (or Stonelite)	(to make 94.5%	(to make up 945 lbs.)

PASTE MIX	% Non-Volatile	lbs.(For approx.130 gal. batch)
Fillers	94.5	945
Plasticized WC-130*	5.5	96
Carbitol	-	9
PMA Preservative	-	4 oz.
Water	-	66 gal.approx.

*contains 5.0 WC-130 solids and 0.5 Dibutyl Phthalate.

RAW MATERIALS

Resin	Per Bulletin 6-104-17
Methocel HG	Per Bulletin 6-16-5
Dibutyl Phthalate	6-98-1
Solvent	6-149-3
P&OF	Per Bulletin 6-143-1
DXW Mineralite	Per Bulletin 6-146-2
Ser-X	Per Bulletin 6-146-2
Asbestos	Per Bulletin 6-7-1, JM-7RF1
CCO Whiting	Per Bulletin 6-24-7
A Dolomite	Per Bulletin 58-2-2
Stonelite	Per Bulletin 6-24-2
Nuodex PMA-18	6-100-2.
Huber CWF Clay	Per Bulletin 6-36-5
Troysan PMA-30	Per Bulletin 6-100-3

PROCESSING:
A. Filler Mix: The dry ingredients are first mixed in a Broughton mixer, and then mikropulverized using a coarse screen as is done in manufacturing dry powder products.

NOTE: The mixer-pulverizer-packer unit is to be thoroughly cleaned of other products before making this filler mix.

USDC9 0654

Consistency Control Test on Filler Mix

A 300 gram sample of the filler mix should be taken after the fillers are blended and mikropulverized. The sample is mixed with water at a consistency of 65cc per 100 gms. (Mixing the powder into the water eliminates lumping to a large degree; any small lumps will disappear with vigorous stirring). About 2 minutes is allowed for mixing; then the mixture is allowed to stand undisturbed for 10 minutes. After standing the mixture is stirred vigorously again for 30 seconds. A Brabender reading is then taken. The reading is recorded after the Brabender has run 3 minutes (or sooner if the reading has become constant). The temperature of the mixture is taken last. The Brabender reading of the sample should match the Research standard sample reading of 420 ± 30 units at 75°F ± 5°F. The asbestos content of the filler mix must be increased if the Brabender reading is too low, and vice versa.

B. Emulsion Plasticization: The Bakelite WC-130 emulsion as supplied has an average of 58% solid, dispersed, p.v.ac. resin. Stir into the emulsion 5½ lbs. of water (exactly 5 pints, 4½ oz.) per 100 lbs. of WC-130 to reduce the solids to 55%. Next, weigh the drum of emulsion (plus added water) and determine net weight of the diluted emulsion. Fifty-five percent of this weight is the weight of the p.v.ac. solids present. The amount of dibutyl phthalate to use is simply 10% of the p.v.ac. solids weight. This will be 5.5 lbs. of dibutyl phthalate per 100 lbs. of diluted WC-130 emulsion. The dibutyl phthalate is then poured slowly into the Bakelite WC-130 while the latter is being stirred with a suitable high speed mixer, i.e., a "Lightnin Mixer". The stirring should continue for a minimum of 20 minutes after all the dibutyl phthalate has been added. The temperature of the dibutyl phthalate and WC-130 must be above 65°F for this operation.

C. Complete Compound: The various ingredients are to be mixed in a heavy duty paste mixer using the following procedure: The required water (except for 1 - 2 gallons withheld to permit final consistency adjustment) is put into the mixer tub, and the carbitol and preservative are added. The mixer is then started. Most of the filler mix is poured into the mixer over a period of 3-6 minutes until the paste has the approximate consistency of the finished product. The plasticized emulsion is then run in gradually, followed by the balance of the fillers. Finally, small amounts of water are added to bring the compound to standard consistency.

FINISHED PRODUCT TEST:

Viscosity: To be 420 ± 20 units immediately after mixing is finished and after the compound has stood for 24 hours, using the following set-up:

(a) Compound to be at 77°F ± 5°F in a standard 1/2 pint paint can with paddle immersed to mark on paddle stem.

(b) Can spindle to rotate 72 R.P.M.

(c) Pin Bladed paddle, and heavy spring suspension in the Brabender are to be used.

DPC09 0649

Operating Division PRODUCT PROCEDURE Approved: MAB	ALL PURPOSE READY MIXED PERF-A-TAPE JOINT COMPOUND CHAMBLEE	No. 61-2-24-1 Date 3-2-61 Page 1 of 3 Cancels page 1 Dated 7-7-60

DESCRIPTION:

A resin-emulsion base, ready-mixed joint compound, with a package life of one year.

Manufacturing Mill: Chamblee

Formula: Je-217

	% Non-Volatile (2/3 Formula V)	Lbs. (for 100 gal. batch approx.)
Mica JC	30.0	80 approx.
DXW Mineralite	(as required)	240
Asbestos Floats	10.0	24 approx.
Huber CWF Clay	0.8	80
Methocel 65 HG	(to match manila color of Sheetrock face paper)	6 - 6 oz.
Ferrite Yellow	(to make 100%)	(to make 800 lbs. total non-volatile)
#9 Marble	5.5	77
Plasticized WC-130*	-	7
Carbitol	-	4 oz.
PMA Preservative	-	53 gals. approx.
Water		

*Contains 5.0 WC-130 solids and 0.5 dibutyl phthalate.

Raw Materials

Resin	Per Bulletin	6-104-17
Methocel HG, 4000 cps.	" "	6-16-5
Dibutyl Phthalate	" "	6-98-1
Solvent	" "	6-149-3
Mica JC	" "	6-143-1
DXW Mineralite	" "	6-146-2
Asbestos	" "	6-7-1
Nuodex PMA-18	" "	6-100-2
Troysan PMA-30	" "	6-100-3
Huber CWF Clay	" "	6-36-5
#9 Georgia Marble	" "	6-24-9
Ferrite Yellow	" "	

DP009 1425

SPECIAL BULLETIN

Operating Division PRODUCT PROCEDURE Approved: 9/18/60	ALL PURPOSE READY-MIXED PERF-A-TAPE JOINT COMPOUND SWEETWATER	No. 61-2-24-Y Date 3-2-61 Page 1 of 2 Cancels page 1 Dated 11-15-60

All-Purpose Ready-Mixed Perf-A-Tape Joint Compound

A resin-emulsion base, ready-mixed Perf-A-Tape Compound.

Manufacturing Plant: Sweetwater

Filler Mix	% Non-Volatile	JE-204 Lbs. (For a 945 Lb. Filler charge)
Mica JC	(Formula V)	150 approx.
DXW Mineralite	30.0	300
Nicolet 7TG25 Asbestos	2 to 4%	30 approx.
Huber CWF Clay	10.0	100
Methocel 65HG (4000 CPS)	0.8	8
Ferrite Yellow	(To match manila color of Sheetrock face paper)	
Carbonate Filler	(To make 94.5%)	(To make 945 lbs.)

Paste Mix	% Non-Volatile	Lbs. (For approx. 130 gal. batch)
Fillers	94.5	945
Plasticized WC-130	5.5*	96
Carbitol	-	9
PMA Preservative	-	4 oz.
Water	-	70 gals. approx.

*Contains 5.0 WC-130 solids and 0.5 Dibutyl Phthalate

Raw Materials: Same as for 61-2-24, except as follows:

DXW Mineralite - per Bulletin 6-146-2
Nicolet 7TG25 Asbestos - per Bulletin 6-7-1
Carbonate Filler - per Bulletin 6-24-10

Processing: Same as for 61-2-24 except on page 2 of 3 under Consistency control Test on Filler Mix. Mix the 300 gram sample of filler mix at 66 cc. per 100 grams to give a Brabender reading of 350 ± 50 at 77°F.

TP009 1009

Original date of issue 3-8-60 SPECIAL BULLETIN 3rd Extension

Operating Division PRODUCT PROCEDURE Approved: JMB	ALL PURPOSE READY-MIXED PERF-A-TAPE JOINT COMPOUND SWEETWATER	No. 61-2-24-Y Date 3-2-61 Page 2 of 2 Cancels Dated NEW

Finished Product Test: Same as 61-2-24 except as follows:
Viscosity - Brabender reading to be 420 ± 20 after the compound has stood for 24 hours.

Color: To match manila color of Sheetrock face paper. Unpigmented Ready-Mixed Compound to be shipped when sales orders so specify. Identify with the word "White" over or under the code number.

Packaging and Shipment: As designated by Department 144.

AMES CONSISTENCY

Plant to manufacture All Purpose Ready-Mixed Perf-A-Tape Compound at an Ames Tool Consistency of 300 ± 20 Brabender units, at 77°F, by diluting with extra water.

Packaging:

The following information is to appear on the container:

"Ames consistency compound should be used within 60 days of this date_____otherwise slight mixing may be necessary before use".

The terminology "For Professional Applicator" is to be discontinued and deleted from label identification.

This Bulletin expires 10-1-61.

TP009 1010

Original date of issue 7-22-59 SPECIAL BULLETIN 4th Extension

Operating Division PRODUCT PROCEDURE	ALL PURPOSE READY-MIXED PERF-A-TAPE JOINT COMPOUND	No. 61-2-24-R
		Date 4-10-61
		Page 1 of 1
Approved: gmB	SOUTH GATE	Cancels Page 1
		Dated 11-15-60

All Purpose Ready-Mixed Perf-A-Tape Joint Compound

A resin-emulsion base, ready-mixed Perf-A-Tape Compound

Manufacturing Plant: South Gate (to manufacture up to 400 M Gallons)

		JE-201
Filler Mix	% Non-Volatile	Lbs. (for 945# Filler Charge)
Mica JC	(Formula V)	150 approx.
M-350	30.0	300
Asbestos Floats	(As required)	35 approx.
Huber Clay	10.0	100
Methocel HG	0.8	8
Ferrite Yellow*	(To match the manila color of Sheetrock Face Paper)	
400 Whiting	(To make 94.5%)	(To make up 945 lbs.)

*Plant to manufacture unpigmented form when requested by Sales Dept.

Paste Mix	% Non-Volatile	Lb. (for approx. 130 gal. batch)
Fillers	94.5	945
Plasticized WC-130*	5.5	96
Carbitol	-	9
PMA Preservative	-	4 oz.
Water	-	71 gal. approx.

*Contains 5.0 WC-130 solids and 0.5 Dibutyl Phthalate.

Raw Materials: Same as for 61-2-24, except as follows:

M 350 Sericite - per Bulletin 6-146-2
400 Whiting - per Bulletin 6-24-1

Processing and Finished Product Test: Same as for 61-2-24 except as follows on page 2 of 3:

1. Consistency Control Test on Filler Mix. Mix the 300 gram sample of Filler mix at 70 cc per 100 grams to give a Brabender reading of 450 ± 50 units at 77°F. The procedure of 61-2-22 is to be followed.

2. Viscosity - To be 450-500 Brabender Units.

Packaging: Containers and labels as designated by Department 144.

Shipment: Per Bulletin 61-1-12.

This Bulletin expires 9-1-61.

DP009 0933

Operating Division PRODUCT PROCEDURE Approved: MJB	ALL PURPOSE READY-MIXED PERF-A-TAPE JOINT COMPOUND	No. 61-2-24 Date 4-2-62 Page 1 of 4 Cancels Page 1 Dated 3-2-61

DESCRIPTION:
A resin-emulsion base, ready-mixed Perf-A-Tape, with a package life of one year.

MANUFACTURING MILLS: New Brighton, Gypsum

FORMULA: JE-186A

FILLER MIX	% Non Volatile	lbs. (For 945lbs. filler charge)
Mica JC	(2/3 For.V)	100 approx.
Ser-X	30.0	300
Asbestos Floats	(as required)	35 approx.
Huber Clay	10.0	100
Methocel HG	0.8	8
Ferrite Yellow	(to match the manila color of Sheetrock face paper)	
A Dolomite (or Stonelite)	(to make 94.5%	(to make up 945 lbs.)

PASTE MIX	% Non-Volatile	lbs. (For approx.130 gal. batch)
Fillers	94.5	945
Plasticized WC-130*	5.5	96
Carbitol	-	9
PMA Preservative	-	8 oz.
Water	-	66 gal.approx.

*contains 5.0 WC-130 solids and 0.5 Dibutyl Phthalate.

RAW MATERIALS

Resin	Per Bulletin 6-104-17
Methocel HG	Per Bulletin 6-16-5
Dibutyl Phthalate	6-98-1
Solvent	6-149-3
P80F	Per Bulletin 6-143-1
DXW Mineralite	Per Bulletin 6-146-2
Ser-X	Per Bulletin 6-146-2
Asbestos	Per Bulletin 6-7-1, JM-7RF1
CCO Whiting	Per Bulletin 6-24-7
A Dolomite	Per Bulletin 58-2-2
Stonelite	Per Bulletin 6-24-2
Nuodex PMA-18	6-100-2.
Huber CWF Clay	Per Bulletin 6-36-5
Troysan PMA-30	Per Bulletin 6-100-3

PROCESSING:

A. Filler Mix: The dry ingredients are first mixed in a Broughton mixer, and then mikropulverized using a coarse screen as is done in manufacturing dry powder products.

NOTE: The mixer-pulverizer-packer unit is to be thoroughly cleaned of other products before making this filler mix.

OPOC9 0649

/ Indicates change.

FINISHED PRODUCT TEST: (cont'd)

Viscosity (cont'd)

Gypsum only - When approved by Dept. 144 orders specifying "HEAVY CONSISTENCY" may be filled at 500 ± 20 units. These orders must be for a full batch (approximately 24 cans) or for multiples of this quantity.

Application Properties: To match standard sample from Research

Grit: None

Bond to Perf-A-Tape: Applied and dried at 70 - 80°F, 40 - 60% R.H. - 4 min.

Rewet Test: 2 normal

Tape Edge Cracking or Check-Cracking: (in bond test application) - None

Color: To match the color of Sheetrock Manila face paper.

Odor: Characteristic

NOTE: These tests to be performed in the same manner as used for dry powder Perf-A-Tape compound - See Bulletin 61-2-22.

PACKAGING:

5 Gallon Pail

Specifications as follows:

5 gallon, flaring pail, manufactured from 1/4 lb. Electrolytic tin plate on 29 gauge steel, with soldered side seams. Ears to be 26 gauge with counter sunk bail hole, attached to pail with cadmium plated rivets. Bails to have 70° to 75° end bend, entering ears and wooden handles. Lid to be 16 lug type, with flowed in rubber gasket. Pails to be lined with 86 gold lacquer as used by Continental Can Co., or equivalent. This lining shall cover interior of pails entirely, including all seams, and rivet hole edges.

Plants are authorized to use lithographed pails when approved by Dept. 144 and when this will give an overall cost reduction.

5 Gallon Carton

Specifications as follows:

10" x 10" x 11-5/8" - 350 lb. test, taped joint, RSC double wall corrugated, printed 4 panels, one color. (Prints for each plant as approved by Dept. 144).

Polyethylene Liner - 12" x 12" x 30"; 0.004 thickness.

1 Gallon Can

Pack two per case the same as paint.

PACKAGING (Cont'd)

100 Ft. Joint System

2 - 1 gallon cans per case with 100' roll of Perf-A-Tape on top of each can. Master case dimension 2-1/8" higher than regular 2 gallon carton.

All containers to be labeled as directed by Dept. 144.

Two WB-34 folders to be included in each master carton of 2-1 gal. cans per carton (1 folder per gallon can).

NOTE: Gypsum to use a special label (T-163 per Purchase Specification 8-26-1) on all 5 gal. containers shipped into the Chicago and Lakeland Districts.

AMES CONSISTENCY

Plants to manufacture All Purpose Ready-Mixed Perf-A-Tape Compound at an Ames Tool Consistency of 300 ±20 Brabender units, at 77°F, by diluting with extra water.

Packaging:

The following information is to appear on the container:

"Ames consistency compound should be used within 60 days of this date _____ otherwise slight mixing may be necessary before use."

The terminology "For Professional Applicator" is to be discontinued and deleted from label identification.

USG 0443

Operating Division PRODUCT PROCEDURE Approved:	ALL PURPOSE READY-MIXED PERF-A-TAPE JOINT COMPOUND CHAMBLEE	No. 61-2-24-1 Date 4-2-62 Page 3 of 3 Cancels page 3 Dated 3-2-61

Finished Product Tests

A. - Consistency: A 100 gallon batch of compound shall take no more than 54 gallons and no less than 52 gallons of water to reach the required Brabender viscosity.

B. - Viscosity: To be 425 ± 25, 24 hours after manufacture, at 77°F using the standard pin paddle on the Brabender Viscometer.

C. - Application: To match that of standard sample.

D. - Bond-To-Tape: 5 minimum at 77°F, 50% R.H.

E. - Tape Edge-Cracking or Check-Cracking (in bond test application) - None

F. - Grit and Lumps - None. Each batch must be checked by spreading the compound on Sheetrock (using a broadknife) to a fine feather edge. The first batch of compound made after a change to a new shipment of asbestos or mica must be tested with an Ames finishing tool (10 or 12") for grit.

G. - Weight Per Gallon - To be determined on each batch and recorded. This is done by filling a 5 gallon can to the known 5 gallon level, determine net weight and divide by 5.

/ Packaging, Labeling: Per Bulletin 61-2-24.

AMES CONSISTENCY

Plants to manufacture All Purpose Ready-Mixed Perf-A-Tape Compound at an Ames Tool Consistency of 300 ± 20 Brabender units, at 77°F, by diluting with extra water.

Packaging:

The following information is to appear on the container:

"Ames consistency compound should be used within 60 days of this date _____ otherwise slight mixing may be necessary before use."

The terminology "For Professional Applicator" is to be discontinued and deleted from label identification.

DP009 1425

ALL PURPOSE READY MIXED
PERF-A-TAPE JOINT COMPOUND

CHAMBLEE

PROCESSING

A. Emulsion Plasticization: The Bakelite WC-130 emulsion as supplied contains an average of 58% solid, dispersed, polyvinyl acetate resin. Stir into the emulsion 5-1/2 lbs. of water (exactly 5 pints, 4-1/2 oz.) per 100 lbs. of WC-130 to reduce the solids to 55%. Next weigh the drum of emulsion (plus added water) and determine the net weight of the diluted emulsion. Fifty-five percent of this weight is the weight of the p.v. ac. solids present. The amount of dibutyl phthalate to be used is simply 10% of the p.v. ac. solids weight. This will be 5.5 lbs. of dibutyl phthalate per 100 lbs. of diluted WC-130 emulsion. The dibutyl phthalate is then poured slowly into the Bakelite WC-130 while the latter is being stirred with a suitable high speed mixer, i.e., a "Lightnin Mixer". The stirring should continue for a minimum of 20 minutes after all the dibutyl phthalate has been added. The temperature of the dibutyl phthalate and WC-130 must be above 65°F for this operation.

/ B. Mixing Procedure on Hockmeyer Mixer - Approx. 140 gal. batch.

Approximately 50 gallons of water are put into the Hockmeyer mixer. (The quantity of water used initially should be the smallest amount which can be used without overloading the motor when the dry materials are added). The Carbitol and PMA-30 are then added and the mixer is run for a few turns to disperse these materials. The dry materials and plasticized emulsion are then added, and the batch is mixed until all lumps are broken down and all materials thoroughly mixed. The mixer is then turned off and the viscosity of a sample is determined on a Brabender viscosimeter. Additional water, as required, is then added and the batch mixed until a smooth, homogeneous mixture is obtained. The mixer is then stopped and another sample is checked on the viscosimeter. If the viscosity is still too high, this procedure is repeated until the proper viscosity is reached.

C. Filling: All 5 gallon containers are to be filled by weight, based on the weight per gallon of each batch.

TP009 1419

/ Indicates Change

Operating Division PRODUCT PROCEDURE Approved: JMB	ALL PURPOSE READY-MIXED PERF-A-TAPE JOINT COMPOUND	No. 61-2-24 Date 4-26-62 Page 1 of 4 Cancels Page 1 Dated 4-2-62

DESCRIPTION:
A resin-emulsion base, ready-mixed Perf-A-Tape, with a package life of one year.

MANUFACTURING MILLS: New Brighton, Gypsum

FORMULA: JE-186A

FILLER MIX	% Non Volatile	lbs. (For 945lbs. filler charge)
Mica JC	(2/3 For.V)	100 approx.
Ser-X	30.0	300
Asbestos Floats	(as required)	35 approx.
Huber Clay	10.0	100
Methocel HG	0.8	8
Ferrite Yellow	(to match the manila color of Sheetrock face paper)	
A Dolomite (or Stonelite)	(to make 94.5%	(to make up 945 lbs.)

PASTE MIX	% Non-Volatile	lbs. (For approx.130 gal. batch)
Fillers	94.5	945
Plasticized WC-130*	5.5	96
Carbitol	-	9
PMA Preservative	-	8 oz.
Water	-	66 gal. approx.

*contains 5.0 WC-130 solids and 0.5 Dibutyl Phthalate.

RAW MATERIALS

Resin	Per Bulletin 6-104-17
Methocel HG	Per Bulletin 6-16-5
Dibutyl Phthalate	6-98-1
Solvent	6-149-3
P8OF	Per Bulletin 6-143-1
DXW Mineralite	Per Bulletin 6-146-2
Ser-X	Per Bulletin 6-146-2
Asbestos	Per Bulletin 6-7-1, JM-7RF1
CCO Whiting	Per Bulletin 6-24-7
A Dolomite	Per Bulletin 58-2-2
Stonelite	Per Bulletin 6-24-2
Nuodex PMA-18	6-100-2.
Huber CWF Clay	Per Bulletin 6-36-5
Troysan PMA-30	Per Bulletin 6-100-3

DP009 0645

mgB	ALL PURPOSE READY-MIXED PERF-A-TAPE JOINT COMPOUND	No. 61-2-24 Date 4-26-62 Page 2 of 4 Cancels Page 2 Dated 3-2-61

PROCESSING

A. Emulsion Plasticization: The Bakelite WC-130 emulsion as supplied has an average of 58% solid, dispersed, p.v.ac. resin. Stir into the emulsion 5-1/2 lbs. of water (exactly 5 pints, 4-1/2 oz.) per 100 lbs. of WC-130 to reduce the solids to 55%. Next, weigh the drum of emulsion (plus added water) and determine net weight of the diluted emulsion. Fifty-five per cent of this weight is the weight of the p.v.ac. solids present. The amount of dibutyl phthalate to use is simply 10% of the p.v.ac. solids weight. This will be 5.5 lbs. of dibutyl phthalate per 100 lbs. of diluted WC-130 emulsion. The dibutyl phthalate is then poured slowly into the Bakelite WC-130 while the latter is being stirred with a suitable high speed mixer, i. e., a "Lightnin Mixer". The stirring should continue for a minimum of 20 minutes after all the dibutyl phthalate has been added. The temperature of the dibutyl phthalate and WC-130 must be above 65°F for this operation.

B. Mixing Procedure on Hockmeyer Mixer:
Approximately 90% of the total amount of water that will be required is put into the Hockmeyer mixer. (The quantity of water used initially should be the smallest amount which can be used without overloading the motor when the dry materials are added). The Carbitol and PMA-30 are then added and the mixer is run for a few turns to disperse these materials. The dry materials and plasticized emulsion are then added and the batch is mixed until all lumps are broken down and all materials thoroughly mixed. The mixer is then turned off and the viscosity of a sample is determined on a Brabender viscosimeter. Additional water, as required, is then added and the batch mixed until a smooth, homogeneous mixture is obtained. The mixer is then stopped and another sample is checked on the viscosimeter. If the viscosity is still too high, this procedure is repeated until the proper viscosity is reached.

C. Filling
All 5 gallon containers are to be filled by weight, based on the weight per gallon of each batch.

FINISHED PRODUCT TEST:
Viscosity: To be 420 ± 20 units immediately after mixing is finished and after the compound has stood for 24 hours, using the following set-up:

(a) Compound to be at 77°F ± 5°F in a standard 1/2 pint paint can with paddle immersed to mark on paddle stem.

(b) Can spindle to rotate 72 R.P.M.

(c) Pin Bladed paddle, and heavy spring suspension in the Brabender are to be used.

TP0039 0647

Operating Division PRODUCT PROCEDURE Approved: MJB	ALL PURPOSE READY-MIXED PERF-A-TAPE JOINT COMPOUND	No. 61-2-24 Date 5-15-62 Page 1 of 4 Cancels Page 1 Dated 4-26-62

DESCRIPTION:
A resin-emulsion base, ready-mixed Perf-A-Tape, with a package life of one year.

MANUFACTURING MILLS: New Brighton, Gypsum

FORMULA: JE-186A

FILLER MIX	% Non Volatile	lbs.(For 945lbs. filler charge)
Mica JC	(2/3 For.V)	100 approx.
Ser-X	30.0	300
Asbestos Floats	(as required)	35 approx.
Huber Clay	10.0	100
Methocel HG	0.8	8
Ferrite Yellow	(to match the manila color of Sheetrock face paper)	
A Dolomite (or Stonelite)	(to make 94.5%	(to make up 945 lbs.)

PASTE MIX	% Non-Volatile	lbs.(For approx.130 gal. batch)
Fillers	94.5	945
Plasticized WC-130*	5.5	96
Carbitol	-	9
PMA Preservative	-	8 oz.
Water	-	66 gal.-approx.

*contains 5.0 WC-130 solids and 0.5 Dibutyl Phthalate.

RAW MATERIALS

Resin	Per Bulletin 6-104-17
Methocel HG	Per Bulletin 6-16-5
Dibutyl Phthalate	6-98-1
Solvent	6-149-3
P80F	Per Bulletin 6-143-1
DXW Mineralite	Per Bulletin 6-146-2
Ser-X	Per Bulletin 6-146-2
Asbestos	Per Bulletin 6-14-5
CCO Whiting	Per Bulletin 6-24-7
A Dolomite	Per Bulletin 58-2-2
Stonelite	Per Bulletin 6-24-2
Nuodex PMA-18	6-100-2.
Huber CWF Clay	Per Bulletin 6-36-5
Troysan PMA-30	Per Bulletin 6-100-3

DPCC9 0644

7 Indicates Change

SPECIAL BULLETIN

Operating Division PRODUCT PROCEDURE Approved: JMB	ALL PURPOSE READY MIXED PERF-A-TAPE JOINT COMPOUND DALLAS	No. 61-2-24-A Date 6-8-62 Page 1 of 4 Cancels Dated NEW

Dallas to manufacture and ship JE-320F All Purpose Ready Mixed Perf-A-Tape Joint Compound into the plant's entire shipping area except the Denver District. Specifications as follows:

Formula: JE 320F

	% Non Volatile	lbs for 260 gal. batch (2000 lbs non volatile)
Mica J C	(1.2 formula V)	320 to 350 approximately
Carey 7RF9 asbestos	As req'd. for correct EB and water content	70 to 90 approximately
#750-S Carbonate	To make 100% N.V.	To make up 2000 lbs non volatile (about 1400 - 1500 lbs)
Granulated Methocel HG 65 4000 cps	0.8%	16 lbs
Plasticized WC 130 emulsion, including PMA	6.05% (5.5% WC 130 solids, .55% dibutyl phthalate and 1.2 lb PMA per 211 lbs plasticized emulsion)	212.2 lbs
Carbitol (or equivalent)	- - -	18 lbs
Water	- - - -	155 ± 1 gal.
Pigments	- - - -	As req'd. for std. manila color. Omit pigment if white color ordered.

USG 0122

MgB	ALL PURPOSE READY MIXED PERF-A-TAPE JOINT COMPOUND DALLAS	No. 61-2-24-A Date 6-8-62 Page 2 of 4 Cancels Dated NEW

Raw Materials:

Mica	per bull. 6-143-1
Asbestos	(New purchase bulletin in preparation)
#750-S Carbonate Filler	6-24-9
Methocel	6-16-5
WC-130	6-104-17
Carbitol	6-149-3
Dibutyl Phthalate	6-98-1
PMA-18 or	6-100-2
PMA-30	6-100-3
Ferrite Yellow Pigment	6-94-?

Processing:

A. Emulsion Plasticization: Bakelite WC-130 Emulsion as supplied nominally contains 58% solids. The exact per cent solids is determined by drying a weighed sample. To minimize skinning tendencies, the emulsion should be diluted to 55% solids as the first step in the manufacturing process. The amount of water to add may be calculated from the following formula:

$$\text{lbs added water} = \frac{WC}{55} - W$$

Where W = The weight in lbs. of the emulsion to be diluted,
and C = Actual per cent solids before dilution.

For 200 lbs of emulsion as supplied 11 lbs water will be required when the initial per cent solids is 58.0. The amount of dibutyl phthalate to be used is 11 lbs per 200 lbs of the diluted emulsion, or 10% of the weight of the non-volatile WC-130 emulsion solids present. The dibutyl phthalate is poured slowly into the diluted emulsion while the latter is stirred with a suitable high speed mixer, i.e., a "Lightnin Mixer". The temperature of the dibutyl phthalate and of the diluted WC-130 must be above 65°F for this operation. Following the dibutyl phthalate addition PMA 30 (or PMA 18) is added at the rate of 1.2 lbs per 200 lbs of the 55% WC 130 emulsion. It is added in the same manner as the dibutyl phthalate. The stirring should continue for a minimum of 20 minutes after all the dibutyl phthalate and the PMA is added.

OP009 0719

REQUEST FOR NEW OR REVISION OF OPERATING BULLETIN

GENERAL DISTRIBUTION
170-K (3 COPIES)

PLANT DISTRIBUTION-ONLY
_____ SEND ORIGINAL [redacted] TO THE PRODUCTION [redacted]

DATE 6-18-62

BULLETIN 61-2-26 AA
temporary

SUBJECT: Perf-A-[redacted] Purpose Compound
([redacted]-97)

PLANTS CONCERNED: Gypsum

DETAILS AND OBJECT OF PROPOSED PRACTICE: (INDICATE WHAT IS WANTED. LIST MAJOR CHANGES, EXPLAIN WHY CHANGE IS WANTED).

1. In title at top of page 1 of 1 delete "Formula AP-82A".
2. In first sentence change AP-82A to read AP-97. Also make this change after Formula in place of AP-82A.
3. Formula AP-97 shown on attached page.

EFFECT ON QUALITY: This new formula gives improved crack resistance and slightly easier sanding properties. Field tests in Detroit indicated a better market acceptance if these shortcomings were improved.

ECONOMICS: (EXPLAIN EFFECT ON FACTORS BELOW IF APPLICABLE TO PROPOSAL)

		SOURCE OF INFORMATION PERSON	DEPT.	DATE
MILL COST (CURRENT) 3.85/cwt.* (EXPECTED) 3.85 cwt.*		WCA	151	3-15-62
SELLING PRICE (CURRENT) (EXPECTED)				
SALES VOLUME 1,000,000 lbs a year		WCA	151	3-15-62
EQUIPMENT CHANGES AND CAPACITIES				
RAW MATERIALS, CONTAINERS, LABELS OR TAPES MADE OBSOLETE = None		WCA	151	3-15-62
FINISHED PRODUCTS OBSOLETED BY THIS PROPOSAL OR REQUIRING SPECIAL DISPOSITION ACTION None		WCA	151	3-15-62

* Raw Materials cost only.

INSTRUCTIONS:

All information requested is required to obtain approval. Mark "Not Applicable" where required. INCOMPLETE REQUESTS WILL BE RETURNED.

Use back of this sheet or additional sheets if necessary. Attach laboratory test reports, field trip reports, and copies of pertinent correspondence.

See Bulletins 1-1 [redacted] additional instructions. Plants to supplement request with marked-up copies (photo copy will do) of bulleti[redacted] proposed revision.

=PLANTS WILL USE [redacted] STOCKS OF CONTAINERS, LABELS AND TAPES UNLESS REVISED BULLETIN INDICATES OTHERWISE.

DO NOT FILL OUT THIS [redacted] — PERSONS TO APPROVE WILL BE LISTED BY DEPT. 170-[redacted]

PLEASE SIGN BULLETIN HERE

DEPT.	NAME	INITIALS	DATE SIGNED

HAVE THE CORRESPONDING CHANGES IN OTHER COMPANY BULLETINS AND MANUALS BEEN REQUESTED?

N/A

REQUEST PREPARED BY - W. C. Anderson

FOR DEPARTMENT 151 - Research

0-9562 REV. 12/61 (PRINTED IN U.S.A.)

0P009 0151A

Operating Division PRODUCT PROCEDURE	ALL PURPOSE READY MIXED PERF-A-TAPE JOINT COMPOUND	No. [illegible] Date [illegible] Page 1 of 4
Approved: [illegible]	DALLAS	Cancels Page 1 Dated 6-8-62

Dallas to manufacture and ship JE-320F All Purpose Ready Mixed Perf-A-Tape Joint Compound into the plant's entire shipping area.
Specifications as follows:

Formula: JE 320F

	% Non Volatile	lbs for 260 gal. batch (2000 lbs non volatile)
Mica J C	(1.2 formula V)	320 to 350 approximately
Carey 7RF9 asbestos	As req'd. for correct BB and water content	70 to 90 approximately
#750-S Carbonate	To make 100% N.V.	To make up 2000 lbs non volatile (about 1400 - 1500 lbs)
Granulated Methocel EG 65 4000 cps	0.8%	16 lbs
Plasticized WC 130 emulsion, including PMA	6.05% (5.5% WC 130 solids, .55% dibutyl phthalate and 1.2 lb PMA per 211 lbs plasticized emulsion)	212.2 lbs
Carbitol (or equivalent)	- - -	18 lbs
Water	- - - -	155 ± 1 gal.
Pigments	- - - -	As req'd. for std. manila color. Omit pigment if white color ordered.

DPC09 0714

± Indicates Change

SPECIAL BULLETIN

Operating Division PRODUCT PROCEDURE	ALL PURPOSE READY MIXED PERF-A-TAPE JOINT COMPOUND	No. 61-2-24-D Date 7-2-62 Page 1 of 1
Approved: MJB	DALLAS	Cancels Dated NEW

Dallas to manufacture All Purpose Ready Mixed Perf-A-Tape Joint Compound using Formula JE 186 D for shipments into New Brighton's joint system area. Specifications as follows:

Formula	JE 186 D % Non Volatile	lbs. for approx. 245 gal batch.
Mica JC	2/3 Formula V	about 100 lbs
DXW Mineralite	30%	600
Nicolet 7TG25 Asbestos	as req'd - about 3½%	about 70 lbs
Huber CWF clay	10	200
Methocel (4000 cps)	0.8	16
#750-S Marble	To make 94.5%	To make up 1890 lbs of dry ingredients
Ferrite Yellow	0.1	2
Plasticized WC-130 emulsion (10% DBP)	5.5%	192 lbs
PMA 18 (or 30)	-	1.2 "
Carbitol	-	18 "
Water	-	Approx. 130 gal

Raw Materials
Per Bull. - 61-2-24-A with addition of Huber CWF Clay - 6-36-5

Processing
Per Bull. - 61-2-24-A (or Bull. Request of 4-20-62)

Finished Product Specs.
Viscosity - To be 525 to 575 on 24 hour test (run on VC-3, 75 RPM, direct reading)
Weight per gal - 12.9 to 13.2 lbs.
Other Tests - Per bull 61-2-24-A(or bulletin request of 4-20-62 for JE320F)

Packaging & Labeling - Per 61-2-24

Shipments - Per directions from Dept. 144 - Chicago.

This Bulletin expires 1-1-63.

OP009 0756

SPECIAL BULLETIN

Operating Division PRODUCT PROCEDURE Approved: JMgB	ALL PURPOSE READY MIXED PERF-A-TAPE JOINT COMPOUND DALLAS	No. 61-2-24-A Date 7-[illegible]-62 Page 1 of 4 Cancels Page 1 Dated 6-3-62

Dallas to manufacture and ship JE-320F All Purpose Ready Mixed Perf-A-Tape Joint Compound into the plant's entire shipping area. Specifications as follows:

Formula: JE 320F

	% Non Volatile	lbs for 260 gal. batch (2000 lbs non volatile)
Mica J C	(1.2 formula V)	320 to 350 approximately
Carey 7RF9 asbestos	As req'd. for correct HB and water content	70 to 90 approximately
#750-S Carbonate	To make 100% N.V.	To make up 2000 lbs non volatile (about 1400 - 1500 lbs)
Granulated Methocel EG 65 4000 cps	0.8%	16 lbs
Plasticized WC 130 emulsion, including PMA	6.05% (5.5% WC 130 solids, .55% dibutyl phthalate and 1.2 lb PMA per 211 lbs plasticized emulsion)	212.2 lbs
Carbitol (or equivalent)	- - -	18 lbs
Water	- - - -	155 ∠ 1 gal.
Pigments	- - - -	As req'd. for std. manila color. Omit pigment if white color ordered.

∠ Indicates Change

TP009 0718

ALL PURPOSE READY MIXED TEST-A-TAPE
JOINT COMPOUND

DALLAS

No. 61-2-24-A
Date 7-2-62
Page 4 of 4
Cancels Page 4
Dated 6-8-62

FINISHED PRODUCT TESTS (Cont'd)

C. Application: To match standard sample (to be supplied from Research.)

D. Bond to Tape: 5 minimum at 77° 50% RH. If a bond less than 5 is obtained retest using another roll of tape. If bond is again below 5, reject the compound for poor bond. If the second test is ok, the poor first test may indicate poor bonding tape, (i.e., tape inadequately sanded on the back side to insure good bond. Such tape should also be rejected for shipment.)

E. Grit and Lumps: None permitted. For routine tests spread to a fine feathered edge on Sheetrock using a broadknife or trowel. For a more critical test dilute the compound to about 250 BB, and spread it on Sheetrock with a 10" or 12" Ames finishing box tool, using a tight crown setting on the tool (#4 or #5 setting).

F. Tape edge cracking or check cracking: Observe the dried bond test application for cracking (use a hand lens). There should be no cracking.

G. Weight per Gallon: Mark the exact height of 5 gal. on a 5 gal. can. Fill the can exactly to this mark with the compound and weigh contents. Divide weight obtained by 5. It should be between 12.6 and 12.9 lbs. per gal. A lower weight indicates excessive air entrainment.

Packaging, Labeling: Per Bull. 61-2-24 (4-2-62) p. 3 and 4. (Note - No material to be made at "Ames Consistency").

Shipments: Ship JE 320F on all orders for Ready Mixed Compound from districts served by Dallas Paint Plant.

This bulletin expires 6-15-63.

OP009 0717

Operating Division PRODUCT PROCEDURE Approved: MJB	ALL PURPOSE READY-MIXED PERF-A-TAPE JOINT COMPOUND	No. 61-2-24 Date 11-30-62 Page 1 of 4 Cancels Page 1 Dated 5-15-62

DESCRIPTION:
A resin-emulsion base, ready-mixed Perf-A-Tape, with a package life of one year.

MANUFACTURING MILLS: New Brighton, Gypsum *

* Note: Gypsum to ship Formula JE 186A when Sales enters R/M orders marked "Special" and destined for the following trade factors - Suburban Drywall, Valpariso, Indiana and Able Drywall, Dayton Ohio or as approved by Dept. 144.

FORMULA: JE-186A

FILLER MIX	% Non Volatile	lbs. (For 945 lbs. filler charge)
Mica JC	(2/3 For. V)	100 approx.
Ser-X	30.0	300
Asbestos Floats	(as required)	35 approx.
Huber Clay	10.0	100
Methocel HG	0.8	8
Ferrite Yellow	(to match the manila color of Sheetrock face paper)	
A Dolomite (or Stonelite)	(to make 94.5%)	(to make up 945 lbs.)

PASTE MIX	% Non-Volatile	lbs. (For approx. 130 gal. batch)
Fillers	94.5	945
Plasticized WC-130*	5.5	96
Carbitol	-	9
PMA Preservative	-	8 oz.
Water	-	66 gal. approx.

* Contains 5.0 WC-130 solids and 0.5 Dibutyl Phthalate.

A Formula JE-295C - Gypsum only

Fillers	% Non-Volatile	Lbs. (for 250 gal batch approx.)
Mica JC	Formula V	270 approx.
Ser-X	15.0	300
JM-7RF1 Asbestos	(as required)	60 approx.
Methocel HG	0.8%	16
Stonelite (or A-Dolomite)	to make 94.0%	to make 1880 lbs.
Ferrite Yellow	to match Sheetrock paper	

Paste Mix	% Non-Volatile	Lbs. (for 250 gal batch approx)
Fillers	94.0	1880
Plast. WC-130	6.0*	218
Carbitol	-	19
PMA-30	-	1.0
Water	-	130 gal. (approx.)

* (Contains 5.4% WC-130 solids and 0.6% dibutyl phthalate)

D

M-5791 6/55 (Printed in U.S.A.)

A Indicates Addition D Indicates Deletion

0PCC9 0634

ALL PURPOSE READY-MIXED
PERF-A-TAPE JOINT COMPOUND

No. 01 [illegible]-24
Date 1[illegible] 30-62
Page 2 [illegible] 4
Cancels Page 2
Dated 4-2[illegible]-62

RAW MATERIALS

Resin	Per Bulletin 6-104-17
Methocel HG	Per Bulletin 6-16-5
Dibutyl Phthalate	6-98-1
Solvent	6-149-3
P80F	Per Bulletin 6-143-1
DXW Mineralite	Per Bulletin 6-146-2
Ser-X	Per Bulletin 6-146-2
Asbestos	Per Bulletin 6-14-5
CCO Whiting	Per Bulletin 6-24-7
A Dolomite	Per Bulletin 58-2-2
Stonelite	Per Bulletin 6-24-2
Nuodex PMA-18	6-100-2
Huber CWF Clay	Per Bulletin 6-36-5
Troysan PMA-30	Per Bulletin 6-100-3

PROCESSING

A. Emulsion Plasticization: The Bakelite WC-130 emulsion as supplied has an average of 58% solid, dispersed, p.v.ac. resin. Stir into the emulsion 5-1/2 lbs. of water (exactly 5 pints, 4-1/2 oz.) per 100 lbs. of WC-130 to reduce the solids to 55%. Next, weigh the drum of emulsion (plus added water) and determine net weight of the diluted emulsion. Fifty-five per cent of this weight is the weight of the p.v.ac. solids present. The amount of dibutyl phthalate to use is simply 10% of the p.v.ac. solids weight. This will be 5.5 lbs. of dibutyl phthalate per 100 lbs. of diluted WC-130 emulsion. The dibutyl phthalate is then poured slowly into the Bakelite WC-130 while the latter is being stirred with a suitable high speed mixer, i. e., a "Lightnin Mixer". The stirring should continue for a minimum of 20 minutes after all the dibutyl phthalate has been added. The temperature of the dibutyl phthalate and WC-130 must be above 65°F for this operation.

B. Mixing Procedure on Hockmeyer Mixer:
Approximately 90% of the total amount of water that will be required is put into the Hockmeyer mixer. (The quantity of water used initially should be the smallest amount which can be used without overloading the motor when the dry materials are added). The Carbitol and PMA-30 are then added and the mixer is run for a few turns to disperse these materials. The dry materials and plasticized emulsion are then added and the batch is mixed until all lumps are broken down and all materials thoroughly mixed. The mixer is then turned off and the viscosity of a sample is determined on a Brabender viscosimeter. Additional water, as required, is then added and the batch mixed until a smooth, homogeneous mixture is obtained. The mixer is then stopped and another sample is checked on the viscosimeter. If the viscosity is still too high, this procedure is repeated until the proper viscosity is reached.

C. Filling
All 5 gallon containers are to be filled by weight, based on the weight per gallon of each batch.

Rearrangement Only

0PCC9 0639

Operating Division PRODUCT PROCEDURE	ALL PURPOSE READY-MIXED	No. 61-2-24
Approved:	PERF-A-TAPE JOINT COMPOUND	Date 4-24-63 Page 1 of 4
		Cancels Page 1 Dated 11-30-62

DESCRIPTION:
A resin-emulsion base, ready-mixed Perf-A-Tape, with a package life of one year.

MANUFACTURING MILLS: New Brighton, Gypsum *

* Note: Gypsum to ship Formula JE 186A when Sales enters R/M orders marked "Special" and destined for the following trade factors - Suburban Drywall, Valpariso, Indiana and Able Drywall, Dayton Ohio or as approved by Dept. 144.

FORMULA: JE-186A

FILLER MIX	% Non Volatile	lbs. (For 945 lbs. filler charge)
Mica JC	(2/3 For. V)	100 approx.
Ser-X	30.0	300
Asbestos Floats	(as required)	35 approx.
Huber Clay	10.0	100
/ Methyl Cellulose	0.8	8
Ferrite Yellow	(to match the manila color of Sheetrock face paper)	
A Dolomite (or Stonelite)	(to make 94.5%)	(to make up 945 lbs.)

PASTE MIX	% Non-Volatile	lbs. (For approx. 130 gal. batch)
Fillers	94.5	945
Plasticized WC-130*	5.5	96
Carbitol	-	9
PMA Preservative	-	8 oz.
Water	-	66 gal. approx.

* Contains 5.0 WC-130 solids and 0.5 Dibutyl Phthalate.

Formula JE-295C - Gypsum only

Fillers	% Non-Volatile	Lbs. (for 250 gal batch approx.)
Mica JC	Formula V	270 approx.
Ser-X	15.0	300
JM-7EF1 Asbestos	(as required)	60 approx.
/ Methyl Cellulose	0.8%	16
Stonelite (or A-Dolomite)	to make 94.0%	to make 1880 lbs.
Ferrite Yellow	to match Sheetrock paper	

Paste Mix	% Non-Volatile	Lbs. (for 250 gal batch approx)
Fillers	94.0	1880
Plast. WC-130	6.0*	218
Carbitol	-	19
PMA-30	-	1.0
Water	-	130 gal. (approx.)

* (Contains 5.4% WC-130 solids and 0.6% dibutyl phthalate)

DP009 0412

/ Indicates Change

Operating Division PRODUCT PROCEDURE Approved: MJB	ALL PURPOSE READY MIXED PERF-A-TAPE JOINT COMPOUND DALLAS	No. 61-2-24-2 Date 7-23-63 Page 3 of 6 Cancels Date NEW

FORMULA: JE 320F

	% Non Volatile	lbs. for 260 gal. batch (2000 lbs. non volatile)
Mica JC	(1.2 formula V)	320 to 350 approximately
Carey 7RF9 asbesots	As req'd for correct BB and water content	70 to 90 approximately
Carbonate Filler	To make 100% N.V.	To make up 2000 lbs. non volatile (about 1400 - 1500 lbs)
Methocel	0.8%	16 lbs.
Plasticized WC 130 emulsion, including PMA	6.05% (5.5% WC 130 solids, .55% dibutyl phthalate and 1.2 lb. PMA per 211 lbs. plasticized emulsion)	212.2 lbs.
Carbitol (or equivalent)	- --	18 lbs.
Water	----	155 ± 1 gal.
Pigment	----	As req'd for std. manila color. Omit pigment if white color ordered.

RAW MATERIALS

Mica	per bul. 6-143-1
Asbestos	6-14-5
Carbonate Filler	6-24-9
Methocel	6-25-6
WC-130	6-104-17
Carbitol	6-149-3
Dibutyl Phthalate	6-98-1
PMA-18 or	6-100-2
PMA-30	6-100-3
Ferrite Yellow Pigment	6-94-?

M-5791 6/55 (Printed in U.S.A.)

0P009 1495

SPECIAL BULLETIN

Operating Division PRODUCT PROCEDURE Approved:	ALL PURPOSE READY MIXED PERF-A-TAPE JOINT COMPOUND NEW BRIGHTON	No. 61-2-24-J Date 3-31-64 Page 1 of 2 Cancels Dated NEW

New Brighton to manufacture JE-388A compound for field trials and subsequent sale as directed by Merchandising.

One 5-gallon can from the first batch is to be submitted to Chicago Research for evaluation. No further batches are to be made and no field trials are to be run until Research has approved the compound.

FINISHED PRODUCT SPECIFICATIONS:

Viscosity: To be 525-575 Brabender units when tested at 77F, using a pin paddle and a Brabender having a 250 cm. gm. torsion head and operating at a cup shaft speed of 75 rpm. For Ames tool use, 375-425 Brabender units.

Application Properties: To match standard sample from Research on initial batch and plant standards thereafter.

Grit: None

Bond to PERF-A-TAPE: Applied and dried at 70-80F, 40-60% RH. -4 minimum.

Rewet hardness: 2 normal.

Tape Edge Cracking: None in bond test application

Check Cracking: None in bond test application

Color: Degree of pigmentation at the discretion of East Coast Merchandise.

Odor: Characteristic

NOTE: These tests to be performed in the same manner as used for dry powder Perf-A-Tape compound; see bulletin 61-2-22.

DP009 0317

No. 61-2-24-J Date 3-31-64 Page 2 of 2 Cancels Dated NEW	ALL PURPOSE READY MIXED PERF-A-TAPE JOINT COMPOUND NEW BRIGHTON

Formula: JE-388A

Filler Mix	% Non-Volatile	Lbs. (for 945 lbs. filler charge)
P-85 Mica	.8x Formula V	150 approx.
Ser-X-sericite	15.0	150
JM 7RF1 asbestos*	as req'd	20 approx.
PC-7RF9 asbestos*	as req'd	20 approx.
Huber CWF clay	5.0	50
Methocel 65 HG	0.8	8
Ferrite yellow	as required, per East Coast Merchandise	
A-Dolomite	to make 94.5%	to make up 945 lbs.

Paste Mix	% Non-Volatile	Lbs. (for approx. 130 gal. batch)
Fillers	94.5	945
Plasticized WC-130**	5.5	96
Carbitol	-	9
PMA Preservative	-	8 ounces
Water	-	68 gallons approx.

* A 1:1 ratio of the two asbestoses should be maintained.
** Contains 5.0% WC-130 solids and 0.5% dibutyl phthalate.

Raw Materials:
P-85 Mica — per PMS bulletin 6-143-3
Other materials — per bulletin 61-2-24

Manufacturing Procedure: Per bulletin 61-2-24

Packaging: Per bulletin 61-2-24. This compound to have a "C" added after the code for identification.

This bulletin expires 4-1-65.

OP009 0943

M-8971 (Back)

Operating Division PRODUCT PROCEDURE Approved:	ALL PURPOSE READY MIXED PERF-A-TAPE JOINT COMPOUND CHAMBLEE	No. 61-2-24-1 Date 5-14-64 Page 1 of 3 Cancels Page 1 Dated 2-28-64

DESCRIPTION:
A resin-emulsion base, ready-mixed joint compound, with a package life of one year.

MANUFACTURING MILL: Chamblee

FORMULA: Je-217

	% Non-Volatile	Lbs. (for 100 gal. batch approx.)
Mica JC	(2/3 Formula V)	80 approx.
DXW Mineralite	30.0	240
Asbestos Floats	(as required)	24 approx.
Huber CWF Clay	10.0	80
Methocel 65 HG	0.8	6 - 6 oz.
Ferrite Yellow	(to match manila color of Sheetrock face paper)	
#9 Marble	(to make 100%)	(to make 800 lbs. total non-volatile)
Plasticized WC-130*	5.5	77
Carbitol	-	7
PMA Preservative	-	8 oz.
Water	-	53 gals. approx.

* Contains 5.0 WC-130 solids and 0.5 dibutyl phthalate.

RAW MATERIALS

Resin	Per	Bulletin	T6-104-55
Methocel HG,4000 cps.	"	"	6-16-5
Dibutyl Phthalate	"	"	6-98-1
Solvent	"	"	6-149-3
Mica	"	"	6-143-1
DXW Mineralite	"	"	6-146-2
Asbestos	"	"	6-7-1
Nuodex PMA-18	"	"	6-100-2
Troysan PMA-30	"	"	6-100-3
Huber CWF Clay	"	"	6-36-5
#9 Georgia Marble	"	"	6-24-9
Ferrite Yellow	"	"	

DP009 1419

/ Indicates Change

Operating Division PRODUCT PROCEDURE Approved:	ALL PURPOSE READY-MIXED PERF-A-TAPE JOINT COMPOUND CHAMBLEE	No. 61-2-24-1 Date 5-14-64 Page 3 of 3 Cancels Page 3 Dated 4-2-62

Finished Product Tests

A. - Consistency: A 100 gallon batch of compound shall take no more than 54 gallons and no less than 52 gallons of water to reach the required Brabender viscosity.

/ B. - Viscosity: To be 550-600 Brabender units 24 hours after manufacture when tested at 77°F with a standard pin paddle on a viscometer operating at 75 rpm and having a 250 cm-gm torsion head.

C. - Application: To match that of standard sample.

D. - Bond-To-Tape: 5 minimum at 77°F, 50% R.H.

E. - Tape Edge-Cracking or Check-Cracking (in bond test application) - None

F. - Grit and Lumps - None. Each batch must be checked by spreading the compound on Sheetrock (using a broadknife) to a fine feather edge. The first batch of compound made after a change to a new shipment of asbestos or mica must be tested with an Ames finishing tool (10 or 12") for grit.

G. - Weight Per Gallon - To be determined on each batch and recorded. This is done by filling a 5 gallon can to the known 5 gallon level, determine net weight and divide by 5.

Packaging, Labeling: Per Bulletin 61-2-24.

AMES CONSISTENCY

/ Plants to manufacture All Purpose Ready-Mixed Perf-A-Tape Compound at an Ames Tool Consistency of 375-425 Brabender units, at 77°F, by diluting with extra water.

Packaging:

The following information is to appear on the container:

"Ames consistency compound should be used within 60 days of this date_____otherwise slight mixing may be necessary before use".

The terminology "For Professional Applicator" is to be discontinued and deleted from label identification.

QP009 1423

Operating Division PRODUCT PROCEDURE Approved: JP	ALL PURPOSE READY-MIXED PERF-A-TAPE JOINT COMPOUND	No. 61-2-24 Date 6-9-64 Page 1 of 4 Cancels Page 1 Dated 4-24-63

DESCRIPTION:
A resin-emulsion base, ready-mixed Perf-A-Tape, with a package life of one year.

MANUFACTURING PLANTS: New Brighton, Gypsum*

*Note: Gypsum to ship Formula JE-186A when Sales enters R/M orders marked "Special" and destined for the following trade factors - Suburban Drywall, Valparaiso, Indiana and Able Drywall, Dayton, Ohio or as approved by Dept. 147-2.

A *Note: Gypsum to manufacture Ready Mixed Joint Compound tinted to match East Chicago's Tufcon Finish on receipt of minimum orders of 250 Gal. or multiples thereof.

FORMULA: JE-186A

FILLER MIX	% Non Volatile	lbs. (For 945 lbs. filler charge)
Mica JC	(2/3 For. V)	100 approx.
Ser-X	30.0	300
Asbestos Floats	(as required)	35 approx.
Huber Clay	10.0	100
Methyl Cellulose	0.8	8
Ferrite Yellow	(to match the manila color of Sheetrock face paper)	
A Dolomite (or Stonelite)	(to make 94.5%)	(to make up 945 lbs.)

PASTE MIX	% Non-Volatile	lbs. (For approx. 130 gal. batch)
Fillers	94.5	945
Plasticized WC-130*	5.5	96
Carbitol	-	9
PMA Preservative	-	8 oz.
Water	-	66 gal. approx.

* Contains 5.0 WC-130 solids and 0.5 Dibutyl Phthalate.

Formula JE-295C - Gypsum only

Fillers	% Non-Volatile	lbs. (For 250 gal batch approx.)
Mica JC	Formula V	270 approx.
Ser-X	15.0	300
JM-7RF1 Asbestos	(as required)	60 approx.
Methyl Cellulose	0.8%	16
Stonelite (or A-Dolomite)	to make 94.0%	to make 1880 lbs.
Ferrite Yellow	to match Sheetrock Paper	

NPOC9 9196

ALL PURPOSE READY-MIXED

PERF-A-TAPE JOINT COMPOUND

FORMULA: (Cont'd)
Formula JE-295-C - Gypsum Only (Cont'd)

Paste Mix	% Non-Volatile	lbs. (for 250 gal.batch approx)
Fillers	94.0	1880
Plast. WC-130	6.0*	218
Carbitol	-	19
PMA-30	-	1.0
Water	-	130 gal. (approx.)

* (Contains 5.4% WC-130 solids and 0.6% dibutyl phthalate)

RAW MATERIALS:

Resin	Per PMS Bul. 6-104-17
Methyl Cellulose	6-25-5, 6-25-6
Dibutyl Phthalate	6-98-1
Solvent	6-149-3
Mica	6-143-1
Sericite	6-146-2
Asbestos Floats	6-14-5
Carbonate Filler	6-24-1, 6-24-2, 6-24-7, 58-2-2
PMA Preservative	6-100-2, 6-100-3
Clay	6-36-5

PROCESSING

A. Emulsion Plasticization: The Bakelite WC-130 emulsion as supplied has an average of 50% solid, dispersed, p.v.ac. resin. Stir into the emulsion 5-1/2 lbs. of water (exactly 5 pints, 4-1/2 oz.) per 100 lbs. of WC-130 to reduce the solids to 55%. Next, weigh the drum of emulsion (plus added water) and determine net weight of the diluted emulsion. Fifty-five per cent of this weight is the weight of the p.v.ac. solids present. The amount of dibutyl phthalate to use is simply 10% of the p.v.ac. solids weight. This will be 5.5 lbs. of dibutyl phthalate per 100 lbs. of diluted WC-130 emulsion. The dibutyl phthalate is then poured slowly into the Bakelite WC-130 while the latter is being stirred with a suitable high speed mixer, i.e., a "Lightnin Mixer". The stirring should continue for a minimum of 20 minutes after all the dibutyl phthalate has been added. The temperature of the dibutyl phthalate and WC-130 must be above 65°F for this operation.

Rearrangement Only

USG 0617

PROCESSING (Cont'd)

B. Mixing Procedure on Hockmeyer Mixer:
Approximately 90% of the total amount of water that will be required is put into the Hockmeyer mixer. (The quantity of water used initially should be the smallest amount which can be used without overloading the motor when the dry materials are added). The Carbitol and PMA-30 are then added and the mixer is run for a few turns to disperse these materials. The dry materials and plasticized emulsion are then added and the batch is mixed until all lumps are broken down and all materials thoroughly mixed. The mixer is then turned off and the viscosity of a sample is determined on a Brabender viscosimeter. Additional water, as required, is then added and the batch mixed until a smooth, homogeneous mixture is obtained. The mixer is then stopped and another sample is checked on the viscosimeter. If the viscosity is still too high, this procedure is repeated until the proper viscosity is reached.

C. Filling
All 5 gallon containers are to be filled by weight, based on the weight per gallon of each batch.

FINISHED PRODUCT TEST:

Viscosity: To be 420 ± 20 units for Formula JE-186A and 450 ± 25 units for Formula JE-295C, immediately after mixing is finished and after the compound has stood for 24 hours, using the following set-up:

(a) Compound to be at 77°F ± 5°F in a standard 1/2 pint paint can with paddle immersed to mark on paddle stem.

(b) Can spindle to rotate 72 R.P.M.

(c) Pin Bladed paddle, and heavy spring suspension in the Brabender are to be used.

Gypsum only - When approved by Dept. 144 orders specifying "HEAVY CONSISTENCY" may be filled at 500 ± 20 units. These orders must be for a full batch (approximately 24 cans) or for multiples of this quantity.

OPC09 0612

Operating Division PRODUCT PROCEDURE Approved:	ALL PURPOSE READY-MIXED PERF-A-TAPE JOINT COMPOUND	No. 61-2-24 Date 12-11-64 Page 1 of 4 Cancels Page 1 Dated 6-9-64

DESCRIPTION:
A resin-emulsion base, ready-mixed Perf-A-Tape, with a package life of one year.

MANUFACTURING PLANTS: New Brighton, Gypsum*

/ * Gypsum to manufacture and ship the following:
Formula JE-186A when Sales enters R/M orders marked "Special" and destined for the following trade factors - Suburban Drywall, Valparaiso, Indiana and Able Drywall, Dayton, Ohio or as approved by Dept. 147-2.

/ Ready Mixed Joint Compound tinted to match East Chicago's Imperial Finish on receipt of minimum orders of 250 Gal. or multiples thereof.

A "Heavy Consistency" on orders approved by Dept. 147-2 for full batch (250 Gals.) or multiples thereof.

A FINISHED PRODUCT SPECIFICATIONS
Viscosity - 600 ± 30 units
Color - To match color of Sheetrock Manila face paper.
Natural white color to be made when specified.
Ames Consistency only - 400 ± 25 units at 77°F.
Heavy Consistency only - 665 ± 25 units.

FORMULA: JE-186A

FILLER MIX	% Non Volatile	lbs. (For 945 lbs. filler charge)
Mica JC	(2/3 For. V)	100 approx.
Ser-X	30.0	300
Asbestos Floats	(as required)	35 approx.
Huber Clay	10.0	100
Methyl Cellulose	0.8	8
Ferrite Yellow	(to match the manila color of Sheetrock face paper)	
A Dolomite (or Stonelite)	(to make 94.5%)	(to make up 945 lbs.)

PASTE MIX	% Non-Volatile	lbs. (For approx. 130 gal. batch)
Fillers	94.5	945
/ Plasticized WC-130**	5.5	96
Carbitol	-	9
PMA Preservative	-	8 oz.
Water	-	66 gal. approx.

/ **Contains 5.0 WC-130 solids and 0.5 Dibutyl Phthalate.

/ Indicates Change A Indicates Addition

CPOC9 0563

ALL PURPOSE READY-MIXED PERF-A-TAPE JOINT COMPOUND

FORMULA: (Cont'd)

Formula JE-295C - Gypsum only

Fillers	% Non-Volatile	lbs. (For 250 gal batch approx.)
Mica JC	Formula V	270 approx.
Ser-X	15.0	300
JM-7RF1 Asbestos	(as required)	60 approx.
Methyl Cellulose	0.8%	16
Stonelite (or A-Dolomite)	to make 94.0%	to make 1880 lbs.
Ferrite Yellow	to match Sheetrock Paper	

Paste Mix	% Non-Volatile	lbs. (for 250 gal. batch approx)
Fillers	94.0	1880
Plast. WC-130	6.0*	218
Carbitol	-	19
PMA-30	-	1.0
Water	-	130 gal. (approx.)

* (Contains 5.4% WC-130 solids and 0.6% dibutyl phthalate)

RAW MATERIALS:

Resin	Per RMS Bul. 6-104-17
Methyl Cellulose	6-25-5, 6-25-6
Dibutyl Phthalate	6-98-1
Solvent	6-149-3
Mica	6-143-1
Sericite	6-146-2
Asbestos Floats	6-14-5
Carbonate Filler	6-24-1, 6-24-2, 6-24-7, 58-2-2
PMA Preservative	6-100-2, 6-100-3
Clay	6-36-5

/ MANUFACTURING PROCEDURE

A. Emulsion Plasticization: The Bakelite WC-130 emulsion as supplied has an average of 58% solid, dispersed, p.v.ac. resin. Stir into the emulsion 5-1/2 lbs. of water (exactly 5 pints, 4-1/2 oz.) per 100 lbs. of WC-130 to reduce the solids to 55%. Next, weigh the drum of emulsion (plus added water) and determine net weight of the diluted emulsion. Fifty-five per cent of this weight is the weight of the p.v.ac. solids present. The amount of dibutyl phthalate to use is simply 10% of the p.v.ac. solids weight. This will be 5.5 lbs. of dibutyl phthalate per 100 lbs. of diluted WC-130 emulsion. The dibutyl phthalate is then poured slowly into the Bakelite WC-130 while the latter is being stirred with a suitable high speed mixer, i.e., a "Lightnin Mixer". The stirring should continue for a minimum of 20 minutes after all the dibutyl phthalate has been added. The temperature of the dibutyl phthalate and WC-130 must be above 65°F for this operation.

/ Indicates Change

NPCC9 9609

Also cancels Bulletin 61-2-24-M, dated 2-12-64.

No. 61-2-24 Date 1-25-65 Page 2 of 4 Cancels Page 2 Dated 12-11-64	ALL PURPOSE READY-MIXED PERF-A-TAPE JOINT COMPOUND

FORMULA: (Cont'd)

Formula JE-295C - Gypsum only (To be identified by adding "Y" to the code)

Fillers	% Non-Volatile Formula V	lbs. (For 250 gal batch approx.) 270 approx.
Mica JC		
Ser-X	15.0	300
JM-7RF9 Asbestos	(as required)	60 approx.
Methyl Cellulose	0.8%	16
Stonelite (or A-Dolomite)	to make 94.0%	to make 1880 lbs.
Ferrite Yellow	to match Sheetrock Paper	

Paste Mix	% Non-Volatile	lbs. (for 250 gal. batch approx)
Fillers	94.0	1880
Plast. WC-130	6.0*	218
Carbitol	-	19
PMA-30	-	1.0
Water	-	130 gal. (approx.)

* (Contains 5.4% WC-130 solids and 0.6% dibutyl phthalate)

RAW MATERIALS:

Resin	Per PMS Bul. 6-104-17
Methyl Cellulose	6-25-5, 6-25-6
Dibutyl Phthalate	6-98-1
Solvent	6-149-3
Mica	6-143-1
Sericite	6-146-2
Asbestos Floats	6-14-5
Carbonate Filler	6-24-1, 6-24-2, 6-24-7, 58-2-2
PMA Preservative	6-100-2, 6-100-3
Clay	6-36-5

MANUFACTURING PROCEDURE

A. Emulsion Plasticization: The Bakelite WC-130 emulsion as supplied has an average of 58% solid, dispersed, p.v.ac. resin. Stir into the emulsion 5-1/2 lbs. of water (exactly 5 pints, 4-1/2 oz.) per 100 lbs. of WC-130 to reduce the solids to 55%. Next, weigh the drum of emulsion (plus added water) and determine net weight of the diluted emulsion. Fifty-five per cent of this weight is the weight of the p.v.ac. solids present. The amount of dibutyl phthalate to use is simply 10% of the p.v.ac. solids weight. This will be 5.5 lbs. of dibutyl phthalate per 100 lbs. of diluted WC-130 emulsion. The dibutyl phthalate is then poured slowly into the Bakelite WC-130 while the latter is being stirred with a suitable high speed mixer, i.e., a "Lightnin Mixer". The stirring should continue for a minimum of 20 minutes after all the dibutyl phthalate has been added. The temperature of the dibutyl phthalate and WC-130 must be above 65°F for this operation.

UPC09 0690

/ Indicates Change

Operating Division PRODUCT PROCEDURE Approved:	ALL PURPOSE READY MIXED PERF-A-TAPE JOINT COMPOUND CHAMBLEE	No. 61-2-24-1 Date 2-3-65 Page 1 of 3 Cancels Page 1 Dated 5-14-64

DESCRIPTION:
A resin-emulsion base, ready-mixed joint compound, with a package life of one year.

MANUFACTURING PLANT: Chamblee

FORMULA: Je-217

	% Non-Volatile	Lbs. (for 100 gal. batch approx.)
Mica JC	(2/3 Formula V)	80 approx.
DXW Mineralite	30.0	240
Asbestos Floats	(as required)	24 approx.
Huber CWF Clay	10.0	80
Methocel 65 HG	0.8	6 - 6 oz.
Ferrite Yellow	(to match manila color of Sheetrock face paper)	
#9 Marble	(to make 100%)	(to make 800 lbs. total non-volatile)
Plasticized WC-130*	5.5	77
Carbitol	-	7
PMA Preservative	-	8 oz.
Water	-	53 gals. approx.

* Contains 5.0 WC-130 solids and 0.5 dibutyl phthalate.

RAW MATERIALS

Resin	Per	Bulletin	6-104-17
Methocel HG,4000 cps.	"	"	6-16-5
Dibutyl Phthalate	"	"	6-98-1
Solvent	"	"	6-149-3
Mica	"	"	6-143-1
DXW Mineralite	"	"	6-146-2
Asbestos	"	"	6-7-1
Nuodex PMA-18	"	"	6-100-2
Troysan PMA-30	"	"	6-100-3
Huber CWF Clay	"	"	6-36-5
#9 Georgia Marble	"	"	6-24-9
Ferrite Yellow	"	"	

DP009 1415

Also cancels Bulletin 61-2-24-K, dated 7-24-64.

Operating Division PRODUCT PROCEDURE Approved: JE	ALL PURPOSE READY-MIXED PERF-A-TAPE JOINT COMPOUND	No. 61-2-24 Date 2-8-65 Page 1 of 4 Cancels Page 1 Dated 12-11-64

DESCRIPTION:
A resin-emulsion base, ready-mixed Perf-A-Tape, with a package life of one year.

MANUFACTURING PLANTS: New Brighton, Gypsum*
"Heavy Consistency" on orders approved by Dept. 147-2 for full batch (250 Gals.) or multiples thereof at both plants.

*Gypsum to manufacture and ship the following:

Formula JE-186A when Sales enters R/M orders marked "Special" and destined for the following trade factors - Suburban Drywall, Valparaiso, Indiana and Able Drywall, Dayton, Ohio or as approved by Dept. 147-2.

Ready Mixed Joint Compound tinted to match East Chicago's Imperial Finish on receipt of minimum orders of 250 Gal. or multiples thereof.

FINISHED PRODUCT SPECIFICATIONS
Viscosity - 600 ∠ 30 units
Color - To match color of Sheetrock Manila face paper.
Natural white color to be made when specified.
Ames Consistency only - 400 ∠ 25 units at 77°F.
Heavy Consistency only - 665 ∠ 25 units.

FORMULA: JE186A

FILLER MIX	% Non Volatile	lbs. (For 945 lbs. filler charge)
Mica JC	(2/3 For. V)	100 approx.
Ser-X	30.0	300
Asbestos Floats	(as required)	35 approx.
Huber Clay	10.0	100
Methyl Cellulose	0.8	8
Ferrite Yellow	(to match the manila color of Sheetrock face paper)	
A Dolomite (or Stonelite)	(to make 94.5%)	(to make up 945 lbs.)

PASTE MIX	% Non-Volatile	lbs. (For approx. 130 gal. batch)
Fillers	94.5	945
Plasticized WC-130**	5.5	96
Carbitol	-	9
PMA Preservative	-	8 oz.
Water	-	66 gal. approx.

**Contains 5.0 WC-130 solids and 0.5 Dibutyl Phthalate.

DP0029 0590

Operating Division PRODUCT PROCEDURE Approved:	ALL PURPOSE READY-MIXED PERF-A-TAPE JOINT COMPOUND	No. 61-2-24 Date 3-11-65 Page 1 of 5 Cancels Page 1 Dated 2-8-65

DESCRIPTION:
A resin-emulsion base, ready-mixed Perf-A-Tape, with a package life of one year.

/ MANUFACTURING PLANTS: New Brighton, Gypsum
/ "Heavy Consistency" on orders approved by Dept. 147-2 or 147-20 for full batch (250 Gals.) or multiples thereof at both plants.

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FINISHED PRODUCT SPECIFICATIONS
Viscosity - 600 ± 30 units
Color - To match color of Sheetrock Manila face paper.
Natural white color to be made when specified.
Ames Consistency only - 400 ± 25 units at 77°F.
Heavy Consistency only - 665 ± 25 units.

FORMULA: JE186A

FILLER MIX	% Non Volatile	lbs. (For 945 lbs. filler charge)
Mica JC	(2/3 For. V)	100 approx.
Ser-X	30.0	300
Asbestos Floats	(as required)	35 approx.
Huber Clay	10.0	100
Methyl Cellulose	0.8	8
Ferrite Yellow	(to match the manila color of Sheetrock face paper)	
A Dolomite (or Stonelite)	(to make 94.5%)	(to make up 945 lbs.)

PASTE MIX	% Non-Volatile	lbs. (For approx. 130 gal. batch)
Fillers	94.5	945
Plasticized WC-130**	5.5	96
Carbitol	-	9
PMA Preservative	-	8 oz.
Water	-	66 gal. approx.

**Contains 5.0 WC-130 solids and 0.5 Dibutyl Phthalate.

No. 61-2-24 Date 3-11-65 Page 2 of 5 Cancels Page 2 Dated 1-25-65	ALL PURPOSE READY-MIXED PERF-A-TAPE JOINT COMPOUND

FORMULA: (Cont'd)

Formula JE-295C - Gypsum only

Fillers	% Non-Volatile	lbs. (For 250 gal batch approx.)
Mica JC	Formula V	270 approx.
Ser-X	15.0	300
JM-7RF9 Asbestos	(as required)	60 approx.
Methyl Cellulose	0.8%	16
Stonelite (or A-Dolomite)	to make 94.0%	to make 1880 lbs.
Ferrite Yellow	to match Sheetrock Paper	

Paste Mix	% Non-Volatile	lbs. (for 250 gal. batch approx)
Fillers	94.0	1880
Plast. WC-130	6.0*	218
Carbitol	-	19
PMA-30	-	1.0
Water	-	130 gal. (approx.)

* (Contains 5.4% WC-130 solids and 0.6% dibutyl phthalate)

RAW MATERIALS:

Resin	Per PMS Bul. 6-104-17
Methyl Cellulose	6-25-5, 6-25-6
Dibutyl Phthalate	6-98-1
Solvent	6-149-3
Mica	6-143-1
Sericite	6-146-2
Asbestos Floats	6-14-5
Carbonate Filler	6-24-1, 6-24-2, 6-24-7, 58-2-2
PMA Preservative	6-100-2, 6-100-3
Clay	6-36-5

MANUFACTURING PROCEDURE

A. Emulsion Plasticization: The Bakelite WC-130 emulsion as supplied has an average of 58% solid, dispersed, p.v.ac. resin. Stir into the emulsion 5-1/2 lbs. of water (exactly 5 pints, 4-1/2 oz.) per 100 lbs. of WC-130 to reduce the solids to 55%. Next, weigh the drum of emulsion (plus added water) and determine net weight of the diluted emulsion. Fifty-five per cent of this weight is the weight of the p.v.ac. solids present. The amount of dibutyl phthalate to use is simply 10% of the p.v.ac. solids weight. This will be 5.5 lbs. of dibutyl phthalate per 100 lbs. of diluted WC-130 emulsion. The dibutyl phthalate is then poured slowly into the Bakelite WC-130 while the latter is being stirred with a suitable high speed mixer, i.e., a "Lightnin Mixer". The stirring should continue for a minimum of 20 minutes after all the dibutyl phthalate has been added. The temperature of the dibutyl phthalate and WC-130 must be above 65°F for this operation.

/ Indicates Change

DPCC 0797

Operating Division PRODUCT PROCEDURE Approved:	ALL PURPOSE READY MIXED PAT JOINT COMPOUND HAGERSVILLE	No. 61-2-24-11 Date 4-13-65 Page 1 of 3 Cancels Dated NEW

DESCRIPTION

A resin-emulsion base, ready-mixed joint compound, with a package life of one year.

MANUFACTURING PLANT - Hagersville

FINISHED PRODUCT SPECIFICATIONS

Viscosity - to be 420 ± 20 Brabender units after manufacture when tested at 77°F with standard pin paddle on viscometer operating at 72 RPM.

Color - To match color of SHEETROCK manila face paper.

Bond - 5 minimum after overnight drying at 77°F and 50% R. H.

Grit and Lumps - None. Each batch must be checked by spreading the compound on SHEETROCK (using a broad knife) to a fine feather edge.

FORMULA - JE-465B

Filler Mix	% Non-Volatile	lbs. (for 945 lb. charge)
Mica JC	2/3 formula V	100 approx.
Asbestos PC-7RF9	As req'd	30 approx.
Huber CWF Clay	10.0	100
Methocel 65 HG (4000 cps)	0.8	8
Ferrite Yellow (to match manila color of SHEETROCK face paper)		
A-Dolomite	to make 94.5%	to make 945 lbs.

Paste Mix	% Non-Volatile	lbs. (for approx. 130 U.S. gal. batch)
Fillers	94.5	945
Resin PM 4386	5.5	96
Carbitol	-	9
PMA-30 Preservative	-	8 oz.
Water	-	Approx. 65 gal.

DP009 2091

No. 61-2-24-11 Date 4-13-65 Page 2 of 3	ALL PURPOSE READY MIXED PAT JOINT COMPOUND
Cancels Dated NEW	HAGERSVILLE

RAW MATERIALS

Resin	Per Bulletin T6-104-55
Methocel 65 HG, 4000 cps	Per Bulletin 6-25-6
Carbitol solvent	Per Bulletin 6-149-3
Mica	Per Bulletin 6-143-1
Asbestos	Per Bulletin 6-14-5
Troysan PMS-30	Per Bulletin 6-100-3
Huber CWF Clay	Per Bulletin 6-36-5
A-Dolomite	Per Bulletin 58-2-2
Ferrite Yellow	

MANUFACTURING PROCEDURE

Mixing - Approximately 50 gals. of water are put into the Hockmeyer mixer. (The quantity of water used initially should be the smallest amount which can be used without overloading the motor when the dry materials are added). The Carbitol and PMA-30 are then added and the mixer is run for a few turns to disperse these materials. The dry materials and plasticized emulsion are then added, and the batch is mixed until all lumps are broken down and all materials thoroughly mixed. The mixer is then turned off and the viscosity of a sample is determined on a Brabender viscosimeter. Additional water, as required, is then added and the batch mixed until a smooth, homogeneous mixture is obtained. The mixer is then stopped and another sample is checked on the viscosimeter. If the viscosity is still too high, this procedure is repeated until the proper viscosity is reached.

Filling - All 4 Gallon containers are to be filled by weight, based on the actual weight per gal. of each batch.

NP009 2092

Operating Division PRODUCT PROCEDURE Approved:	ALL PURPOSE READY MIXED PAT JOINT COMPOUND HAGERSVILLE	No. 61-2-24-11 Date 4-13-65 Page 3 of 3 Cancels Dated NEW

PACKAGING

4 Imperial gallon carton - To be unprinted; other specifications per PMS 8-10-17. Labels per Dept. 247.

1 Imperial gallon cans - Packed 4 per master carton. Labels per Dept. 247.

OP009 2993

Originally issued 3-31-64. 1st Extension

No. 61-2-24-J Date 4-8-65 Page 2 of 2 Cancels Page 2 Dated 3-31-64	ALL PURPOSE READY MIXED PERF-A-TAPE JOINT COMPOUND NEW BRIGHTON

Formula: JE-388A

Filler Mix	% Non-Volatile	Lbs. (for 945 lbs. filler charge)
P-85 Mica	.8x Formula V	150 approx.
Ser-X-sericite	15.0	150
JM-7RF1 asbestos*	as req'd	20 approx.
PC 7RF9 asbestos*	as req'd	20 approx.
Huber CWF clay	5.0	50
Methocel 65 HG	0.8	8
Ferrite yellow	as required, per East Coast Merchandise	
A-Dolomite	to make 94.5%	to make up 945 lbs.

Paste Mix	% Non-Volatile	Lbs. (for approx. 130 gal. batch)
Fillers	94.5	945
Plasticized WC-130**	5.5	96
Carbitol	-	9
PMA Preservative	-	8 ounces
Water	-	68 gallons approx.

* A 1:1 ratio of the two asbestoses should be maintained.
** Contains 5.0% WC-130 solids and 0.5% dibutyl phthalate.

Raw Materials:
P-85 Mica per PMS bulletin 6-143-3
Other materials per bulletin 61-2-24

Manufacturing Procedure: Per bulletin 61-2-24

Packaging: Per bulletin 61-2-24. This compound to have a "G" added after the code for identification.

/ This bulletin expires 4-1-66.

NP009 0945

M-8971 (Back)

/ Indicates Change

Operating Division PRODUCT PROCEDURE Approved:	ALL PURPOSE READY MIXED PERF-A-TAPE JOINT COMPOUND CHAMBLEE	No. 61-2-24-1 Date 6-1-65 Page 1 of 3 Cancels Page 1 Dated 2-3-65

DESCRIPTION:
A resin-emulsion base, ready-mixed joint compound, with a package life of one year.

MANUFACTURING PLANT: Chamblee

FORMULA: Je-217

	% Non-Volatile	Lbs. (for 100 gal. batch approx.)
Mica JC	(2/3 Formula V)	80 approx.
DXW Mineralite	30.0	240
Asbestos Floats	(as required)	24 approx.
Huber CWF Clay	10.0	80
Methyl Cellulose	0.8	6 - 6 oz.
Ferrite Yellow	(to match manila color of Sheetrock face paper)	
#9 Marble	(to make 100%)	(to make 800 lbs. total non-volatile)
Plasticized WC-130*	5.5	77
Carbitol	-	7
PMA Preservative	-	8 oz.
Water	-	53 gals. approx.

* Contains 5.0 WC-130 solids and 0.5 dibutyl phthalate.

RAW MATERIALS

Resin	Per Bulletin	6-104-17
Methyl Cellulose	" "	6-25-5, 6-25-6
Dibutyl Phthalate	" "	6-98-1
Solvent	" "	6-149-3
Mica	" "	6-143-1
DXW Mineralite	" "	6-146-2
Asbestos	" "	6-7-1
Nuodex PMA-18	" "	6-100-2
Troysan PMA-30	" "	6-100-3
Huber CWF Clay	" "	6-36-5
#9 Georgia Marble	" "	6-24-9
Ferrite Yellow	" "	

00009 1413

Operating Division PRODUCT PROCEDURE Approved: JP	ALL PURPOSE READY MIXED PERF-A-TAPE JOINT COMPOUND DALLAS	No. 61-2-24-2 Date 8-13-65 Page 3 of 6 Cancels Page 3 Date 7-23-63

FORMULA: JE 320F

	% Non Volatile	lbs. for 260 gal. batch (2000 lbs. non volatile)
Mica JC	(1.2 formula V)	320 to 350 approximately
Carey 7RF9 asbesots	As req'd for correct BB and water content	70 to 90 approximately
Carbonate Filler	To make 100% N.V.	To make up 2000 lbs. non volatile (about 1400 - 1500 lbs)
Methocel	0.8%	16 lbs.
Plasticized WC 130 emulsion, including PMA	6.05% (5.5% WC 130 solids, .55% dibutyl phthalate and 1.2 lb. PMA per 211 lbs. plasticized emulsion)	212.2 lbs.
Carbitol (or equivalent)	- --	18 lbs.
Water	----	155 ± 1 gal.
Pigment	----	As req'd for std. manila color.

RAW MATERIALS

	per bul.
Mica	6-143-1
Asbestos	6-14-5
Carbonate Filler	6-24-9
Methocel	6-25-6
WC-130	6-104-17
Carbitol	6-149-3
Dibutyl Phthalate	6-98-1
PMA-18 or	6-100-2
PMA-30	6-100-3
Ferrite Yellow Pigment	6-94-?

00009 1471

Operating Division PRODUCT PROCEDURE Approved:	ALL PURPOSE READY MIXED PERF-A-TAPE JOINT COMPOUND CHAMBLEE	No. 61-2-24-1 Date 12-21-65 Page 1 Cancels Page 1 Dated 6-1-65

DESCRIPTION

A resin - emulsion base, ready-mixed joint compound, with a package life of one year.

MANUFACTURING PLANT - Chamblee

IDENTIFICATION AND PACKAGING - Per bulletin 61-2-24.

Ames Consistency
Plants to manufacture All Purpose Ready-Mixed Perf-A-Tape Compound at an Ames Tool Consistency of 375-425 Brabender units, at 77°F, by diluting with extra water.

FINISHED PRODUCT SPECIFICATIONS

A. - Consistency: A 100 gallon batch of compound shall take no more than 54 gallons and no less than 52 gallons of water to reach the required Brabender viscosity.

B. - Viscosity: To be 550-600 Brabender units 24 hours after manufacture when tested at 77°F with a standard pin paddle on a viscometer operating at 75 rpm and having a 250 cm-gm torsion head.

C. - Application: To match that of standard sample.

D. - Bond-To-Tape: 5 minimum at 77°F, 50% R.H.

E. - Tape Edge-Cracking or Check-Cracking (in bond test application) - None

F. - Grit and Lumps - None. Each batch must be checked by spreading the compound on Sheetrock (using a broadknife) to a fine feather edge. The first batch of compound made after a change to a new shipment of asbestos or mica must be tested with an Ames finishing tool (10 or 12") for grit.

G. - Weight Per Gallon - To be determined on each batch and recorded. This is done by filling a 5 gallon can to the known 5 gallon level, determine net weight and divide by 5.

- 0 -

0141 600dU

Operating Division PRODUCT PROCEDURE Approved:	CONFIDENTIAL DO NOT REPRODUCE OR COPY ALL PURPOSE READY MIXED PERF-A-TAPE JOINT COMPOUND CHAMBLEE	No. 61-2-24-1 Date 12-21-65 Page 2 Cancels Page 2 Dated 4-20-62

FORMULA: Je-217

	% Non-Volatile	Lbs. (for 100 gal. batch approx.)
Mica JC	(2/3 Formula V)	80 approx.
DXW Mineralite	30.0	240
Asbestos Floats	(as required)	24 approx.
Huber CWF Clay	10.0	80
Methyl Cellulose	0.8	6 - 6 oz.
Ferrite Yellow	(to match manila color of Sheetrock face paper)	
#9 Marble	(to make 100%)	(to make 800 lbs. total non-volatile)
PM-4366	5.5	73
Carbitol	-	7
PMA Preservative	-	8 oz.
Water	-	53 gals. approx.

RAW MATERIALS

PM-4366	Per	Bulletin	T6-104-55
Methyl Cellulose	"	"	6-25-5, 6-25-6
Solvent	"	"	6-149-3
Mica	"	"	6-143-1
DXW Mineralite	"	"	6-146-2
Asbestos	"	"	6-7-1
Nuodex PMA-18	"	"	6-100-2
Troysan PMA-30	"	"	6-100-3
Huber CWF Clay	"	"	6-36-5
#9 Georgia Marble	"	"	6-24-9
Ferrite Yellow	"	"	

JP009 1411

CONFIDENTIAL
DO NOT REPRODUCE OR COPY

ALL PURPOSE READY MIXED PERF-A-TAPE JOINT COMPOUND
CHAMBLEE

MANUFACTURING PROCEDURE

A. Mixing Procedure on Hockmeyer Mixer - Approx. 140 gal. batch.

Approximately 50 gallons of water are put into the Hockmeyer mixer. (The quantity of water used initially should be the smallest amount which can be used without overloading the motor when the dry materials are added). The Carbitol and PMA-30 are then added and the mixer is run for a few turns to disperse these materials. The dry materials and plasticized emulsion are then added, and the batch is mixed until all lumps are broken down and all materials thoroughly mixed. The mixer is then turned off and the viscosity of a sample is determined on a Brabender viscosimeter. Additional water, as required, is then added and the batch mixed until a smooth, homogeneous mixture is obtained. The mixer is then stopped and another sample is checked on the viscosimeter. If the viscosity is still too high, this procedure is repeated until the proper viscosity is reached.

B. Filling: All 5 gallon containers are to be filled by weight, based on the weight per gallon of each batch.

End

JP009 1400

Operating Division PRODUCT PROCEDURE Approved: JJ	CONFIDENTIAL DO NOT REPRODUCE OR COPY ALL PURPOSE READY MIXED PERF-A-TAPE JOINT COMPOUND	No. 61-2-24-12 Date 4-22-66 Page 3 Cancels Dated NEW

FORMULA JE-388A

Filler Mix	5 Non-Volatile	Lbs. (for 945 lbs. filler charge)
P-85 Mica	.8x Formula V	150 Approx.
Ser-X-sericite	15.0	150
JM 7HF1 asbestos*	as req'd	20 approx.
PC 7HF9 asbestos*	as req'd	20 approx.
Huber CWF clay	5.0	50
Methocel 65 HG	0.8	8
Ferrite yellow	as required per Eastern	Construction Products Division
A-Dolomite	to make 94.5%	to make up 945 lbs.

Paste Mix	% Non-Volatile	Lbs. (for approx. 130 gal. batch)
Fillers	94.5	945
Plasticized WC-130**	5.5	96
Carbitol	-	9
PMA Preservative	-	8 ounces
Water	-	68 gallons approx.

* A 1:1 ratio of the two asbestoses should be maintained.
** Contains 5.0% WC-130 solids and 0.5% dibutyl phthalate.

Raw Materials:

P-85 Mica	Per PMS bulletin 6-143-3
Other materials	Per bulletin 61-2-24

Manufacturing Procedure

Per bulletin 61-2-24

End

OP009 2241

Operating Division		No. 61-2-24
PRODUCT PROCEDURE	ALL PURPOSE READY-MIXED	Date 10-4-66
Approved:	PERF-A-TAPE JOINT COMPOUND	Page 1
		Cancels Page 1
		Dated 3-11-65

DESCRIPTION

A resin-emulsion base, ready-mixed Perf-A-Tape, with a package life of one year.

MANUFACTURING PLANTS

New Brighton, Gypsum
"Heavy Consistency" on orders approved by Marketing for full batch (250 Gals.) or multiples thereof at both plants.

IDENTIFICATION AND PACKAGING

5 Gallon Pail
Regular per PIS Bul. 8-29-3.

NEW BRIGHTON ONLY
5 Gallon Pumping Carton: This carton, per PIS 8-10-17-1, is to be shipped on all orders for cartons except those specifying the non-pumping carton. Plastic plate per PIS_____ is to be glued on the bottom of the carton with Arabol adhesive VP3-25, or equal.

5 Gallon Non-Pumping Carton: Carton per PIS 8-10-17-2 and liner per PIS_____. The plastic plate is not to be used in this carton. Both types of cartons are to have the tops sealed by glueing only, in order to preserve the easy-open feature. The bottoms may be closed by glueing or by "blind stapling".

GYPSUM ONLY

Cartons per PIS 8-10-17.

4 Gallon Carton: Gypsum to use 4 gallon carton for shipment into Milwaukee District or as directed by Merchandising Department #147-2.

Specifications per PIS 8-10-29.

1 Gallon Can: Pack four per case the same as paint.

100 Ft. Joint System: Two 1 gallon cans per case with 100' roll of Perf-A-Tape on top of each can. Master carton per PIS 8-10-16.

All containers to be labeled as directed by Dept. 147-2.

Two WB-34 folders to be included in each master carton of 2-1 gal. cans per carton (1 folder per gallon can).

NOTE: Gypsum to use a special label (T-163 per Purchase Specification 8-26-1) on all 5 gallon containers shipped into the Chicago and Lakeland Districts.

DPCC 9 4516

No. 61-2-24 Date 10-4-66 Page 2 Cancels Page 2 Dated 3-11-65	ALL PURPOSE READY-MIXED PAN-A-TAPE JOINT COMPOUND

FINISHED PRODUCT SPECIFICATIONS

Viscosity - 600 ± 30 units
Color - To match color of Sheetrock Manila face paper.
Natural white color to be made when specified.
Amos Consistency only - 400 ± 25 units at 77°F.
Heavy Consistency only - 665 ± 25 units.

- 0 -

Rearrangement Only

DPCC9 0510

Operating Division PRODUCT PROCEDURE Approved:	**CONFIDENTIAL** **DO NOT REPRODUCE OR COPY** ALL PURPOSE READY-MIXED REV-A-TAPE JOINT COMPOUND	No. 61-2-24 Date 10-4-66 Page 3 Cancels Page 3 Dated 1-6-65

FORMULA J-186A

Filler Mix:	% Non-Volatile	lbs. (For 945 lbs. filler charge)
Mica JC	(2/3 For. V)	100 approx.
Ser-X	30.0	300
Asbestos Floats	(as Required)	35 approx.
Huber Clay	10.0	100
Methyl Cellulose	0.6	6
Ferrite Yellow	(to match the manila color of Sheetrock face paper)	
A Dolomite (or Stonelite)	(to make 94.5%)	(to make up 945 lbs.)

Paste Mix:	% Non-Volatile	lbs. (For approx. 130 gal. batch)
Fillers	94.5	945
Plasticized WX-130 **	5.5	96
Carbitol	-	9
PMA Preservative	-	8 oz.
Water	-	66 gal. approx.

** Contains 5.0 WC-130 solids and 0.5 Dibutyl Phthalate.

UPCC 0591

Rearrangement Only

CONFIDENTIAL

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ALL PURPOSE READY-MIXED
PERF-A-TAPE JOINT COMPOUND

FORMULA: (Cont'd)

Formula JE-295C - Gypsum only

Fillers	% Non-Volatile Formula V	lbs. (For 250 gal batch approx.)
Mica JC	15.0	270 approx.
Ser-X	(as required)	300
JM-7RF9 Asbestos	0.8%	60 approx.
Methyl Cellulose	to make 94.0%	16
Stonelite (or A-Dolomite)	to match Sheetrock Paper	to make 1880 lbs.
Ferrite Yellow		

Paste Mix	% Non-Volatile	lbs. (for 250 gal. batch approx)
Fillers	94.0	1880
Plast. WC-130	6.0*	218
Carbitol	-	19
PMA-30	-	1.0
Water	-	130 gal. (approx.)

* (Contains 5.4% WC-130 solids and 0.6% dibutyl phthalate)

RAW MATERIALS:

Resin	Per PMS Bul. 6-104-17
Methyl Cellulose	6-25-5, 6-25-6
Dibutyl Phthalate	6-98-1
Solvent	6-149-3
Mica	6-143-1
Sericite	6-146-2
Asbestos Floats	6-14-5
Carbonate Filler	6-24-1, 6-24-2, 6-24-7, 58-2-2
PMA Preservative	6-100-2, 6-100-3
Clay	6-36-5

MANUFACTURING PROCEDURE

A. Emulsion Plasticization: The Bakelite WC-130 emulsion as supplied has an average of 58% solid, dispersed, p.v.ac. resin. Stir into the emulsion 5-1/2 lbs. of water (exactly 5 pints, 4-1/2 oz.) per 100 lbs. of WC-130 to reduce the solids to 55%. Next, weigh the drum of emulsion (plus added water) and determine net weight of the diluted emulsion. Fifty-five per cent of this weight is the weight of the p.v.ac. solids present. The amount of dibutyl phthalate to use is simply 10% of the p.v.ac. solids weight. This will be 5.5 lbs. of dibutyl phthalate per 100 lbs. of diluted WC-130 emulsion. The dibutyl phthalate is then poured slowly into the Bakelite WC-130 while the latter is being stirred with a suitable high speed mixer, i.e., a "Lightnin Mixer". The stirring should continue for a minimum of 20 minutes after all the dibutyl phthalate has been added. The temperature of the dibutyl phthalate and WC-130 must be above 65°F for this operation.

Change in Page Numbering Only

DPOC9 0512

MANUFACTURING PROCEDURE (Cont'd)

B. Mixing Procedure on Hockmeyer Mixer:
Approximately 90% of the total amount of water that will be required is put into the Hockmeyer mixer. (The quantity of water used initially should be the smallest amount which can be used without overloading the motor when the dry materials are added). The Carbitol and PMA-30 are then added and the mixer is run for a few turns to disperse these materials. The dry materials and plasticized emulsion are then added and the batch is mixed until all lumps are broken down and all materials thoroughly mixed. The mixer is then turned off and the viscosity of a sample is determined on a Brabender viscosimeter. Additional water, as required, is then added and the batch mixed until a smooth, homogeneous mixture is obtained. The mixer is then stopped and another sample is checked on the viscosimeter. If the viscosity is still too high, this procedure is repeated until the proper viscosity is reached.

C. Filling
All 5 gallon containers are to be filled by weight, based on the weight per gallon of each batch.

AMES CONSISTENCY

Plants to manufacture All Purpose Ready-Mixed Perf-A-Tape Compound at an Ames Tool Consistency of 300 ± 20 Brabender units, at 77°F, by diluting with extra water.

QUALITY CONTROL:

Viscosity: To be determined after the compound has stood for 24 hours, using the following set-up.

(a) Compound to be at 77°F ± 5°F in a standard 1/2 pint paint can with paddle immersed to mark on paddle stem.

(b) Can spindle to rotate 75 R.P.M. on VC-3, 250 gm. cm. head, Visco Corder.

(c) - Pin Bladed paddle to be used.

USG 5000

No. 61-2-24 Date 10-4-66 Page 6	**CONFIDENTIAL** **DO NOT REPRODUCE OR COPY**
Cancels NEW Dated	ALL PURPOSE READY-MIXED PERF-A-TAPE JOINT COMPOUND

UALITY CONTROL (Cont'd)

Application Properties: To match standard sample from Research

Grit: None

Bond to Perf-A-Tape: Applied and dried at 70 - 80° F, 40 - 60% R.H. - 4 min.

Rewet Test: 2 normal

Tape Edge Cracking or Check-Cracking: (in bond test application) - none

Odor: Characteristic

NOTE: These tests to be performed in the same manner as used for dry powder Perf-A-Tape compound - See Bulletin 61-2-22.

M-5791-C (Back)

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Operating Division	CONFIDENTIAL	No. 61-2-24-1
PRODUCT PROCEDURE	DO NOT REPRODUCE OR COPY	Date 11-7-66
Approved: JB	ALL PURPOSE READY MIXED PERF-A-TAPE JOINT COMPOUND CHAMBLEE	Page 2
		Cancels Page 2 Dated 12-21-65

FORMULA: Je-217

	% Non-Volatile	Lbs. (for 100 gal. batch approx.)
Mica JC	(2/3 Formula V)	80 approx.
DXW Mineralite	30.0	240
Asbestos Floats	(as required)	24 approx.
Huber CWF Clay	10.0	80
Methyl Cellulose	0.8	6 - 6 oz.
Ferrite Yellow	(to match manila color of Sheetrock face paper)	
#9 Marble	(to make 100%)	(to make 800 lbs. total non-volatile)
PM-4366	5.5	73
Carbitol	-	7
PMA Preservative	-	8 oz.
Water	-	53 gals. approx.

RAW MATERIALS

PM-4366	Per Bulletin	T6-104-55
Methyl Cellulose	" "	6-25-5, 6-25-6
Solvent	" "	6-149-3
Mica	" "	6-143-1
DXW Mineralite	" "	6-146-2
C Asbestos 7RF9	" "	6-7-1
Nuodex PMA-18	" "	6-100-2
Troysan PMA-30	" "	6-100-3
Huber CWF Clay	" "	6-36-5
#9 Georgia Marble	" "	6-24-9
Ferrite Yellow	" "	

Operating Division	CONFIDENTIAL DO NOT REPRODUCE OR COPY	No. 61-2-24-12 Date 3-29-67 Page 1
PRODUCT PROCEDURES Approved: J.S.	ALL PURPOSE READY MIXED PRE-A-TAPE JOINT COMPOUND	Cancels Page 3 Dated 4-22-66

FORMULA	JE-1284	
Filler Mix	**% Non-Volatile**	**Lbs. (for 945 lbs. filler charge)**
P-85 Mica	.8x Formula V	150 Approx.
Ser-X-sericite	15.0	150
JM 7AF1 asbestos*	as req'd	20 approx.
PC 7AF9 asbestos*	as req'd	20 approx.
Huber CWF clay	5.0	50
Methocel 65 HG	0.8	8
Ferrite yellow	As required per Gypsum Construction Products Division	
A-Dolomite	to make 9[illegible]	to make up 9[illegible] lbs.

Paste Mix	**% Non-Volatile**	**Lbs. (for 1000 gal. batch)**
Fillers	24.5	945
C FA-4386	3.5	95
Carbitol	-	9
PMA Preservative	-	3 ounces
Water	-	68 gallons approx.

* A 1:1 ratio of the two asbestos should be maintained.

D

Raw Materials:

P-85 Mica — Per GMS bulletin 5-143-5
Other materials — Per bulletin [illegible]

Manufacturing Procedure

Per bulletin 61-2-24

DP009 2/66

Deletion